

Natural Gas Monthly

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Natural Gas Publications and Databases Available Electronically

All of the natural gas publications are available electronically on the EIA website. Certain natural gas data are also provided in database formats on the web site. The table below is a guide to the major natural gas products.

Product	Format	Contents
Publications		
<i>Natural Gas Weekly Market Update</i>	PDF	Analysis of current price, supply and storage data
<i>Natural Gas Monthly</i>	PDF	Monthly supply, disposition, and price data
<i>Natural Gas Annual</i>	PDF	Annual supply, disposition, and price data
<i>Historical Natural Gas Annual</i>	PDF	Historical annual supply, disposition, and price data from 1930 - 1997
<i>Issues and Trends</i>	PDF	Comprehensive analysis of growth and change in the natural gas industry
<i>U.S. Crude Oil, Natural Gas and Natural Gas Liquids Reserves</i>	PDF	Proved reserves in the United States
<i>Oil and Gas Field Code Master List</i>	PDF	Listing of U.S. oil and gas field names
<u>Databases</u>		
Monthly Data	TXT	Tables 1-6, and 9 from the <i>Natural Gas Monthly</i>
Historical Monthly Data	EXE	Consumption and price data, 1984-1994; 1995-present
Annual Data	TXT	Tables from the <i>Natural Gas Annual</i>
Historical Annual Data	TXT	Tables from the <i>Historical Natural Gas Annual</i>
Field Codes	EXE	Oil & Gas Field Code Master List
<u>Applications</u>		
EIA-176 Query System	EXE	Company filings to the Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition"
EIAGIS	EXE	Periodic updates for users of the EIAGIS-NG Geographic Information System

PDF files are image files that can be viewed through Adobe Acrobat.

TXT files are ASCII text. They may be replications of published tables, including table titles, column and row identification, or they may be flat files with a minimum of content description suitable for input to spreadsheets or other programs.

EXE files are executables that can be downloaded then opened. Databases are distributed as self-executing Zipped archives which spawn numerous data files and documentation. Applications are distributed as self-executing Zipped archives which initially generate numerous files and then form an application which is installed on the user's PC.

Preface

The *Natural Gas Monthly (NGM)* is prepared in the Natural Gas Division, Office of Oil and Gas, Energy Information Administration (EIA), U.S. Department of Energy (DOE), under the direction of Kenneth A. Vagts.

General questions and comments regarding the *NGM* may be referred to Ann M. Ducca (202) 586-6137. Specific technical questions may be referred to the appropriate persons listed in Appendix E.

The *NGM* highlights activities, events, and analyses of interest to public and private sector organizations associated with the natural gas industry. Volume and price data are presented each month for natural gas production, distribution, consumption, and interstate pipeline activities. Producer-related activities and underground storage data are also reported. From time to time, the *NGM* features articles designed to assist readers in using and interpreting natural gas information.

The data in this publication are collected on surveys conducted by the EIA to fulfill its responsibilities for gathering and reporting energy data. Some of the data are collected under the authority of the Federal Energy Regulatory Commission (FERC), an independent commission within the DOE, which has jurisdiction primarily in the regulation of electric utilities and the interstate natural gas industry. Geographic coverage is the 50 States and the District of Columbia.

Explanatory Notes supplement the information found in tables of the report. A description of the data collection surveys that support the *NGM* is provided in the Data Sources section. A glossary of the terms used in this report is also provided to assist readers in understanding the data presented in this publication.

All natural gas volumes are reported at a pressure base of 14.73 pounds per square inch absolute (psia) and at 60 degrees Fahrenheit. Cubic feet are converted to cubic meters by applying a factor of 0.02831685.

Common Abbreviations Used in the Natural Gas Monthly

AGA	American Gas Association	IOGCC	Interstate Oil and Gas Compact Commission
Bbl	Barrels	LNG	Liquefied Natural Gas
BLS	Bureau of Labor Statistics, U.S. Department of Labor	Mcf	Thousand Cubic Feet
Bcf	Billion Cubic Feet	MMBtu	Million British Thermal Units
BOM	Bureau of Mines, U.S. Department of the Interior	MMcf	Million Cubic Feet
Btu	British Thermal Unit	MMS	United States Minerals Management Service, U.S. Department of the Interior
DOE	U.S. Department of Energy	NGL	Natural Gas Liquids
DOI	U.S. Department of the Interior	OCS	Outer Continental Shelf
EIA	Energy Information Administration, U.S. Department of Energy	STIFS	Short-Term Integrated Forecasting System
FERC	Federal Energy Regulatory Commission	STEO	Short Term Energy Outlook
		Tcf	Trillion Cubic Feet

Contents

Special Focus: “Status of Natural Gas Pipeline System Capacity Entering the 2000-2001 Heating Season”	vii
Special Report: “Natural Gas Winter Outlook 2000-2001”	xix
Highlights	1
Appendices	
A. Explanatory Notes	73
B. Data Sources	81
C. Statistical Considerations	87
D. Natural Gas Reports and Feature Articles	93
E. Technical Contacts	95
Glossary	97
Tables	
1. Summary of Natural Gas Production in the United States, 1994-2000	7
2. Supply and Disposition of Dry Natural Gas in the United States, 1994-2000	8
3. Natural Gas Consumption in the United States, 1994-2000	10
4. Selected National Average Natural Gas Prices, 1994-2000	12
5. U.S. Natural Gas Imports, by Country, 1994-2000	14
6. U.S. Natural Gas Exports, by Country, 1994-2000	16
7. Marketed Production of Natural Gas, by State, 1994-2000	17
8. Gross Withdrawals and Marketed Production of Natural Gas by State, June 2000	20
9. Underground Natural Gas Storage - All Operators, 1994-2000	21
10. Underground Natural Gas Storage - by Season, 1997-2000	23
11. Underground Natural Gas Storage - Salt Cavern Storage Fields, 1994-2000	24
12. Underground Natural Gas Storage - Storage Fields Other than Salt Caverns, 1994-2000	25
13. Net Withdrawals from Underground Storage, by State, 1998-2000	26
14. Activities of Underground Natural Gas Storage Operators, by State, August 2000	30
15. Natural Gas Deliveries to Residential Consumers, by State, 1998-2000	31

16. Natural Gas Deliveries to Commercial Consumers, by State, 1998-2000	35
17. Natural Gas Deliveries to Industrial Consumers, by State, 1998-2000.	39
18. Natural Gas Deliveries to Electric Utility Consumers, by State, 1998-2000.	43
19. Natural Gas Deliveries to All Consumers, by State, 1998-2000.	47
20. Average City Gate Price, by State, 1998-2000.	51
21. Average Price of Natural Gas Delivered to Residential Consumers, by State, 1998-2000.	54
22. Average Price of Natural Gas Sold to Commercial Consumers, by State, 1998-2000	57
23. Average Price of Natural Gas Sold to Industrial Consumers, by State, 1998-2000	60
24. Average Price of Natural Gas Delivered to Electric Utility Consumers, by State, 1998-2000.	63
25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1998-2000	66
A1. Methodology for Reporting Initial Monthly Natural Gas Supply and Disposition Data	73
C1. Standard Error for Natural Gas Deliveries and Price to Consumers by State, July 2000	92

Figures

1. Production and Consumption of Natural Gas in the United States, 1997-2001	9
2. Natural Gas Deliveries to Consumers in the United States, 1996-2000	11
3. Average Price of Natural Gas Delivered to Consumers in the United States, 1996-2000	13
4. Average Price of Natural Gas in the United States, 1996-2000	13
5. Working Gas in Underground Natural Gas Storage in the United States, 1997-2000	22
6. Percentage of Total Deliveries Represented by Onsystem Sales, 1996-2000	72

Status of Natural Gas Pipeline System Capacity Entering the 2000-2001 Heating Season

This special report looks at the capabilities of the national natural gas pipeline network in 2000 and provides an assessment of the current levels of available capacity to transport supplies from production areas to markets throughout the United States during the upcoming heating season. It also examines how completion of currently planned expansion projects and proposed new pipelines would affect the network.

During the summer and fall of 2000 natural gas prices reached record highs for a nonheating season period. The dramatic rise in prices resulted from an upsurge in natural gas demand, mainly from electric generation needs during a warmer-than-usual spring and summer. The increased demand has occurred while domestic production levels have continued to decrease over the past several years.¹ Low natural gas prices during 1998 and 1999 dampened exploration and development efforts and caused some lower producing wells to be shut in or abandoned. Natural gas pipeline capacity, on the other hand, has grown with end-use demand, and as sources of new supply have developed, new pipelines have been built to bring this gas to markets.² As the next heating season (November 1, 2000 through March 31, 2001) approaches, however, the ongoing question remains as to whether there is sufficient pipeline capacity to meet most possible contingencies. Last winter was warmer than normal on average, so a return to normal weather would add to system demand.

Overview

Generally speaking, as the nation enters the 2000-2001 heating season available natural gas pipeline capacity on the national grid appears adequate to meet most peak-day demands, assuming an average winter.³ However, there are some points on the system where capacity-constraint and bottleneck problems could arise during severe weather periods, as incremental demand increases beyond local capabilities. Each of the several regions of the nation (Figure SR1) contains some area(s) where the

potential exists for mainline transmission segments to experience capacity shortfalls during periods of extremely heavy demand. For example, on a regional basis:

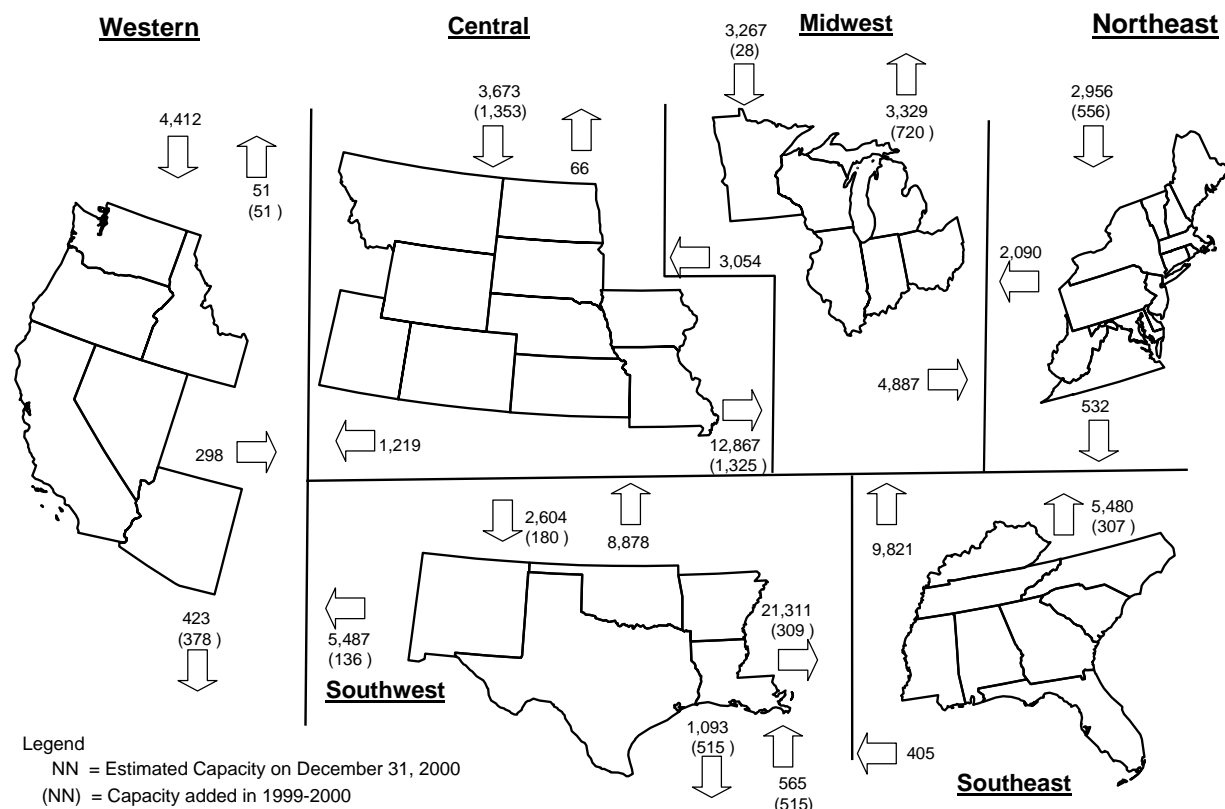
- **The Northeast Region** has several local areas where deliverability problems could increase. In the New York City area, for instance, capacity constraint problems have occurred in recent years during unusual weather periods. Additionally, in the Boston, Massachusetts area, where pipeline capacity is already heavily utilized, demand has been growing and is expected to grow rapidly over the next several years, especially from developers of gas-fired power generation plants. Also, the Leidy area of north central Pennsylvania, where a number of major interstate natural gas pipelines interconnect, has the potential to become a constraint point for pipeline gas flowing to the East Coast, and particularly into the northern New Jersey, New York City area.
- **Portions of the Western Region**, notably the California market, are experiencing growing demand for natural gas for electrical generation, especially during very warm summer weather periods. Utilization levels on the major transmission pipelines serving the State have been well above 90 percent in recent months and could reach their limit if demand levels continue to increase. Service needs in the southern Nevada area continue to remain at a very high level, suggesting the need for system expansion in that area as well.
- **The Central Region** has a problem of excess production and limited receipt or exit capacity. Expanding coal-bed methane production in the region has outpaced the development of longhaul capacity to carry the gas to end-use markets. New gathering and header systems have been built this past year to move the gas from the field to the mainline, but not enough matching interstate pipeline capacity has been installed. Only in the past several months have proposals been made to

¹See Energy Information Administration, *Natural Gas Monthly*, Table 7, September 1999, (Washington, DC, October 1999).

²In most areas in the United States, except for those near major natural gas production fields, major longhaul natural gas pipeline systems provide a link between suppliers and the regional pipeline network that directs the gas to the eventual consumer. The overall capacity of these trunklines usually reflects the needs of regional or market pipelines, which are sometimes other major interstate companies, but most often are local distribution companies.

³This discussion assumes that normal operations will be maintained on the national pipeline system during an average heating season.

Figure SR1. Estimated Region-to-Region Natural Gas Pipeline Capacity at the End of 2000
(Million Cubic Feet per Day)



Sources: Energy Information Administration (EIA), EIAGIS-NG Geographic Information System: Natural Gas Pipeline State Border Capacity Database as of September 2000; Natural Gas Proposed Pipeline Construction Database, as of September 2000, compiled from Federal Energy Regulatory Commission filings and various industry news sources.

expand the area's interstate systems. Capacity constraint problems exiting the production areas have resulted in the region having the lowest average natural gas spot prices in the nation.

- In the Midwest Region**, completion of the Alliance Pipeline (1,325 million cubic feet per day) in the last quarter of 2000 could lead to some short-term excess capacity during the upcoming heating season. All of the new interstate gas transmission capacity that was to have been completed in 2000 and would transport a large portion of the new supplies to the Northeast Region will not be in place when Alliance is placed in service. As a result, markets within the region should have little or no problem with natural gas supplies. On the other hand, the numerous current proposals to expand natural gas transmission capacity to growing regional markets, such as the Milwaukee, Wisconsin metropolitan area, could reflect the possibility of localized capacity constraint situations developing if demand growth outpaces the implementation of these proposals.
- The Southeast Region** has no immediate pipeline capacity limitation problems. Florida, North Carolina, and South Carolina experienced significant growth in natural gas demand over the past decade but sufficient additional pipeline capacity has been installed to match the increase in demand. During the early 1990's, North Carolina and South Carolina, in particular, experienced some interstate pipeline curtailments in service during extremely heavy demand periods that occurred not only in the local area but also downstream in Northeast regional markets. The addition of new pipeline capacity and the integration of sizeable liquefied natural gas (LNG) peaking facilities in North Carolina have lessened, although not eliminated, the possibility of this occurring again.
- Within the Southwest Region** there are no apparent interstate capacity constraint problems, although some local bottleneck problems on gathering or intrastate systems in the region could limit service to the interstate system during severe weather periods. The growing market for natural

gas in the region's electric generation sector may bring about some localized service limitations in the near term, but the growth in natural gas pipeline capacity in the region is keeping pace with this growing demand. On the interstate pipeline network, which exports regional supplies to other parts of the nation, selected systems have upgraded to enhance operations and system integrity. But because competition from Canadian supplies in the Midwest in particular has lessened the growth in demand for Southwest supplies, and hence, pipeline capacity serving that region, there has not been a need for any major expansion over the past decade. Indeed, one natural gas pipeline, Trunkline Gas System, extending from Louisiana to Illinois, is in the process of converting a portion of its system to a natural gas liquids line.

Recent Expansion Activity

Through this year and last, at least 61 natural gas pipeline construction projects will have been completed and placed in service in the United States: 35 in 1999 (Figure SR2) and 29 in 2000 (Figure SR3). Of these, 21 are new pipelines (10 of which are 100 miles or greater in length), while 40 are expansions to existing systems (including new laterals). The cumulative new installed pipeline capacity represented by these projects amounts to more than 12.1 billion cubic feet per day (Bcf/d) of added pipeline capacity (Figure SR4). These projects either added capacity directly to the interstate network, improved local intrastate service, or expanded access to producing fields or natural gas market centers.⁴ Sixteen of the projects added capacity that increased interregional transmission capability by 6.1 Bcf/d: 4,381 million cubic feet per day (MMcf/d) within and into the United States, 771 MMcf/d into Canada, and 893 MMcf/d into Mexico (Figure SR1).

Major Growth in Import Capacity

Much of the 1999-2000 pipeline construction has focused upon expanding the deliverability of Canadian gas to the U.S. Midwest and Northeast (Table SR1). The Maritimes and Northeast Pipeline system, which began service in

early 2000, transports gas from the Sable Island field in eastern offshore Canada to New England, and together with the Portland Natural Gas Pipeline system, in service in early 1999, increased pipeline capacity into the Northeast by 578 MMcf/d. That is more than the combined 1998 annual natural gas consumption of five of the six New England States (excluding Massachusetts). More impressively, in October 2000, the Alliance Pipeline, which will be capable of transporting up to 1,325 MMcf/d of natural gas from British Columbia, Canada, to Illinois, is expected to be placed in service. These projects alone represent a 15-percent increase in overall natural gas import capacity since 1998: a 58-percent increase into the Central Region (most of which is destined for the Midwest) and a 23-percent increase into the Northeast Region.

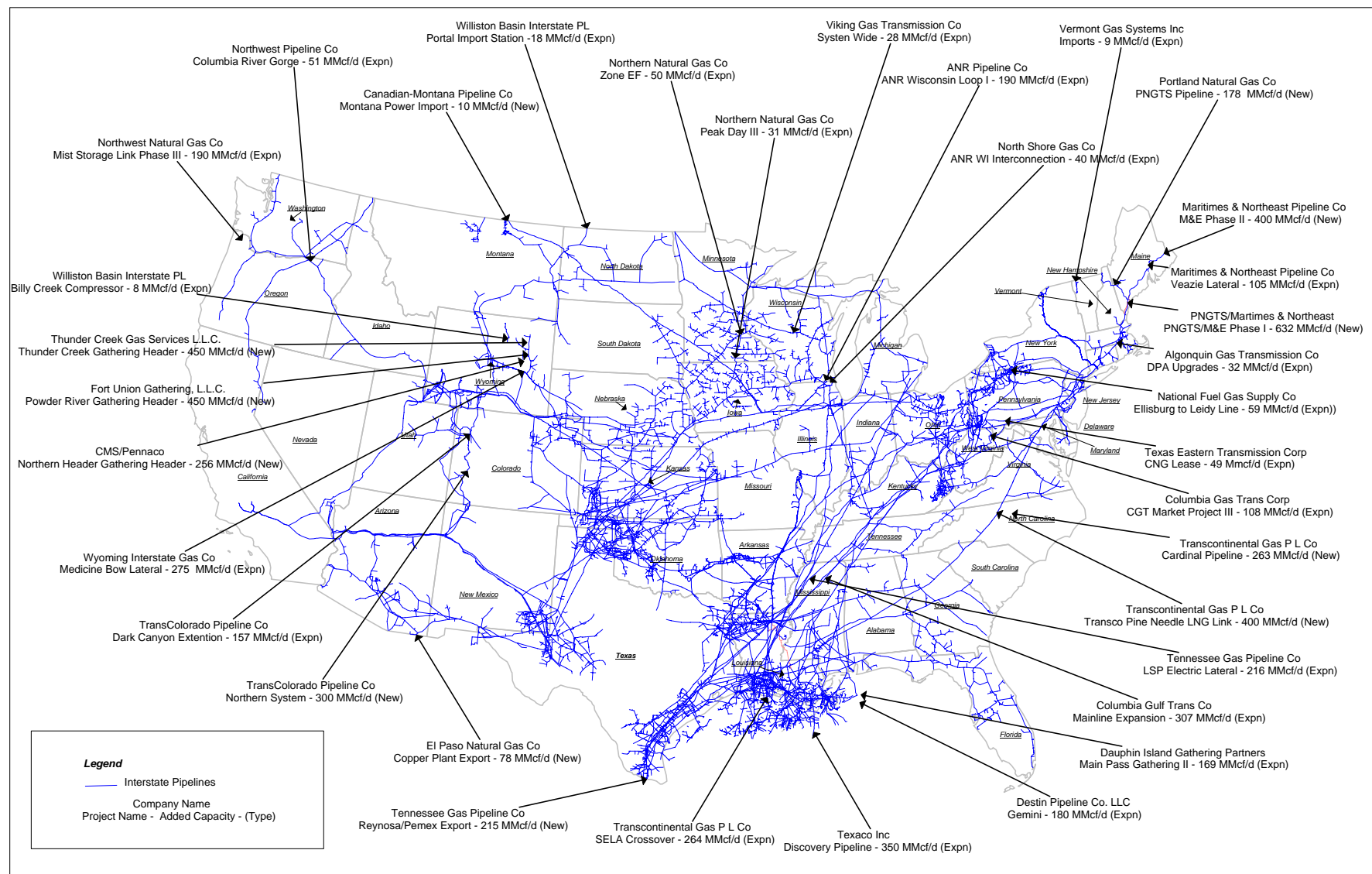
In conjunction with the Alliance pipeline, the new Vector Pipeline system (720 MMcf/d), is scheduled to become operational in late 2000 (Figure SR3). It will transport some of the Alliance Pipeline's supplies to eastern U.S. markets and back into Canada. Its route will go from the Chicago, Illinois area, eastward through the State of Michigan into Ontario, Canada, across Ontario to Lake Erie, and back into the United States. With an expansion of the Union Gas System of Ontario (Millennium West Project) and a Lake Erie crossing built by TransCanada Pipeline LTD (both 700 MMcf/d), the postponed (until 2002) Millennium Pipeline Project (714 MMcf/d) sponsored by the Columbia Energy Group would then transport the gas across New York State to the New York City metropolitan area.

New Capacity To Support Coal-Bed Gas Development

Significant expansion also occurred in the Central Region as new pipeline capacity was installed in the Rocky Mountains area of northern Wyoming and southern Montana (the Powder River Basin, primarily). Three new major gathering (header) pipelines, with a total of 1,156 MMcf/d of capacity, were completed in late 1999-early 2000. Coal-bed methane gas wells are being brought on line rapidly, and new pipeline exit capacity is needed in the area. The Wyoming Interstate Pipeline Company, which is one of the principal transporters moving gas out of the area, increased its capacity by 36 percent (275 MMcf/d) in 2000 and has recently announced an additional 675 MMcf/d expansion slated for completion in 2001.

⁴The marketability of most proposed projects is tested through "open-season" exercises whereby potential customers have placed bids for future capacity on the proposed projects. The planned capacity of the projects usually reflects the results of these open seasons and indicates that, at least at the moment, local distribution companies and other major customers believe demand will grow sufficiently to support the incremental supplies destined for these markets. The FERC or other jurisdictional agencies will allow these projects to proceed only if sufficient binding commitments are entered into by future customers.

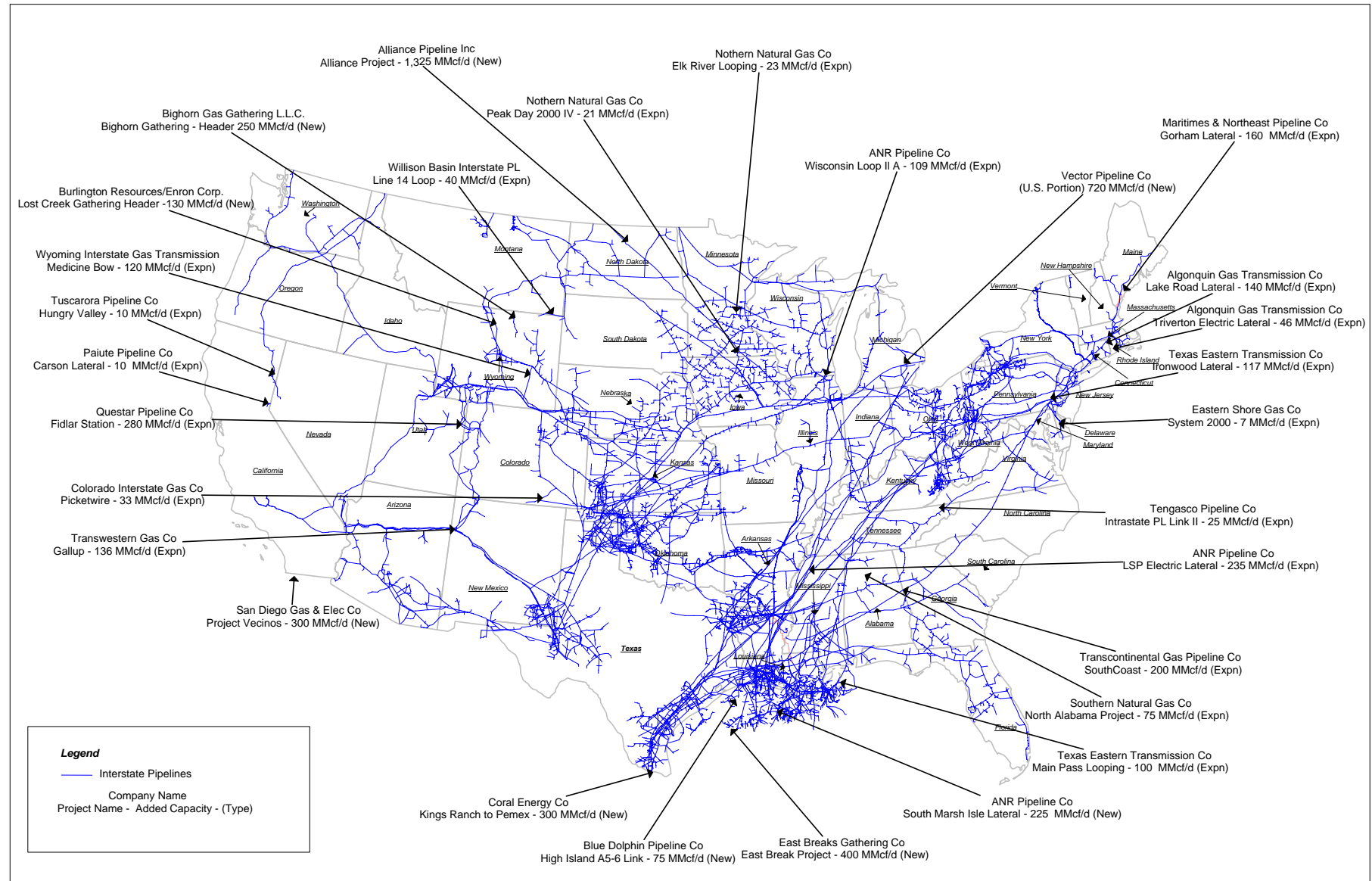
Figure SR2. U.S. Natural Gas Pipeline Projects Completed in 1999



Note: MMcf/d = Million cubic feet per day. Expn = Expansion.

Sources: Energy Information Administration (EIA), EIA GIS-NG Geographic Information System: Natural Gas Pipeline State Border Capacity Database as of September 2000; Natural Gas Proposed Pipeline Construction Database, as of September 2000, compiled from Federal Energy Regulatory Commission filings and various industry news sources.

Figure SR3. U.S. Natural Gas Pipeline Projects Completed, or Scheduled for Completion, in 2000



Note: MMcf/d = Million cubic feet per day. Expn = Expansion.

Sources: Energy Information Administration (EIA), EIAGIS-NG Geographic Information System: Natural Gas Pipeline State Border Capacity Database as of September 2000; Natural Gas Proposed Pipeline Construction Database, as of September 2000, compiled from Federal Energy Regulatory Commission filings and various industry news sources.

Also in the region, although not directly connected to Powder River Basin supplies, is the Transcolorado Pipeline system, completed in late 1999. This system extends from the Piceance Basin of northwestern Colorado through the San Juan Basin in southern Colorado/northern New Mexico to interconnections with El Paso Natural Gas Company and Transwestern Pipeline Company, allowing shippers to move up to 300 MMcf/d to California markets.

Improvements in Northeast Deliverability

More pipeline expansion projects were completed in the Northeast Region in 1999-2000 than in any other part of the United States, with 14 projects placed in service, accounting for 2.0 Bcf/d of additional deliverability. (This level of capacity increase was exceeded only in the Southwest Region.) Many of the projects improved deliverability within the local marketplace or addressed some bottlenecks that were limiting service in specific areas. However, the recent postponement of the Tennessee Gas Pipeline Company's Zone 6 expansion, which was to help improve available pipeline capacity between new delivery points off the PNGTS/Maritimes & Northeast system (in Massachusetts) and market areas in Connecticut and New York State, will leave a deficiency of 288 MMcf/d that was unanticipated for the upcoming heating season. Moreover, several other projects, which were also originally proposed for completion in 2000 and would have helped to meet the growing demand in the region, have been postponed for several years.

Intraregional Growth in the Southeast

The nine natural gas pipeline expansions completed in the Southeast Region in 1999-2000 were mainly to improve deliverability within the region, primarily in North and South Carolina, Georgia, and Alabama. About 1.9 Bcf/d of additional capacity was added in the region, which included enhancement of the Columbia Gulf Transmission system (307 MMcf/d) and completion of several Transcontinental Gas Pipeline system projects that totaled 863 MMcf/d of added system capacity. The Transcontinental projects included completion of the Cardinal intrastate pipeline and Pine Needle LNG link in North Carolina, and the Southcoast expansion of Transcontinental's mainline in Alabama and Georgia.

Minimal Growth in the Western Region

The least amount of pipeline development in 1999-2000 occurred in the Western Region with the completion of only five projects totaling 397 MMcf/d of new capacity within the region. This is not surprising since interstate capacity within and into the region increased

significantly, by 52 percent, between 1990 and 1996 as access to Canadian supplies increased sharply and San Juan Basin suppliers gained greater access to California markets for natural gas.⁵ There are indications, nonetheless, that the region will be needing additional pipeline capacity in the near future (see next section).

Support for Offshore Development

After several consecutive years of extensive development, installation of additional offshore Gulf of Mexico pipeline capacity decreased significantly in 1999-2000. In 1997 and 1998, for instance, 14 natural gas pipeline projects were completed that added a total of 6.4 Bcf/d of new pipeline capacity in the Gulf, most of which represented large capacity pipelines connecting onshore facilities with developing offshore sites, particularly in the deepwater areas of the Gulf. Still, during 1999-2000 eight significant projects were completed, adding 1.8 Bcf/d to the area's pipeline capacity. The majority (six) of these projects were built primarily to improve gathering operations and to link new and expanding producing platforms located in the Gulf with recently completed offshore mainlines directed to onshore facilities.

Export Capacity to Mexico

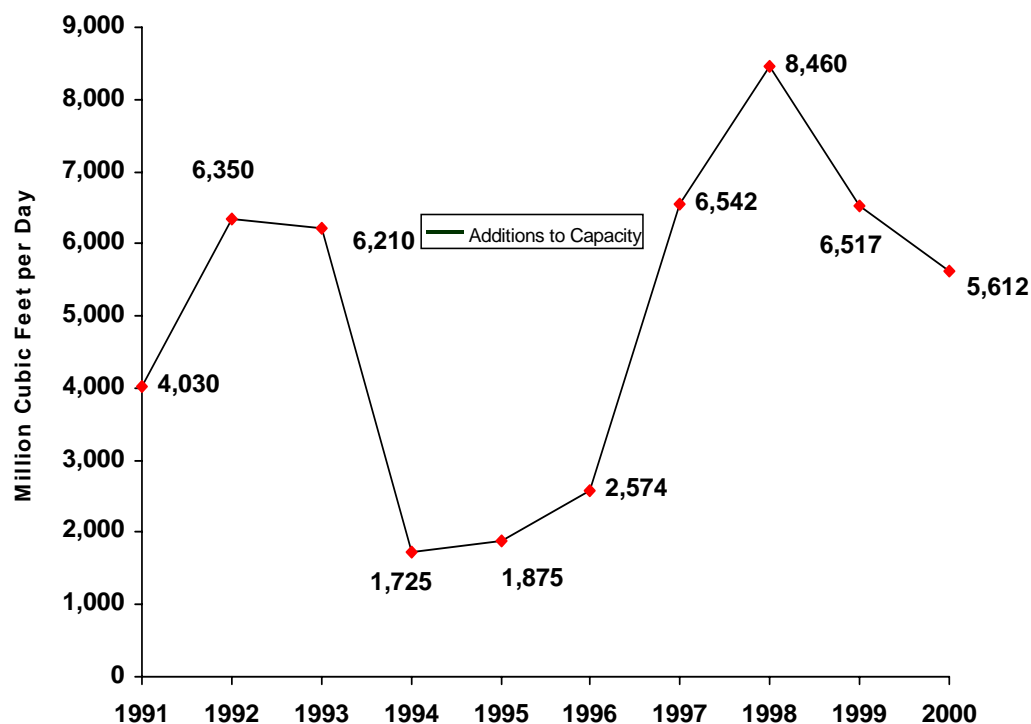
Natural gas export capacity to Mexico also increased during the period. Several projects, which improved pipeline export capacity to Mexico by 893 MMcf/d, were completed in 1999-2000. These projects accounted for the largest amount of new export capacity installed during the decade. Two of the projects, Tennessee Gas Pipeline Company's Reynosa/Monterrey project and Corel Energy Company's Kings Ranch/Pemex project, as bidirectional lines, also increased import capacity to the United States for the first time since the early 1980's (Figure SR1). The impetus for most of the increased export capacity has been to support mostly industrial and power generation customers located in the border area. By the end of 2000, export capacity to Mexico will stand at 2.1 Bcf/d.

Major Capital Investments in Capacity

By the close of 2000, an estimated \$4.6 billion will have been spent on new pipeline and system expansions since January 1999 (Figure SR5). Of that, expenditures on new pipeline development and major extensions/laterals to existing systems will have

⁵See Energy Information Administration, *Natural Gas 1998: Issues and Trends*, DOE/EIA-0560 (98) Chapter 5 (Washington, DC, June 1999).

Figure SR4. Major Additions to U.S. Natural Gas Pipeline Capacity, 1991-2000



Sources: Energy Information Administration (EIA), EIAGIS-NG Geographic Information System: Natural Gas Pipeline State Border Capacity Database as of September 2000; Natural Gas Proposed Pipeline Construction Database, as of September 2000, compiled from Federal Energy Regulatory Commission filings and various industry news sources.

accounted for more than 70 percent of total expenditures, while expansions (loopings, added compression) to existing systems will account for the rest. In 1999, the largest level of expenditure was for projects terminating in the Northeast Region, \$1.1 billion, while in 2000, projects terminating in the Midwest accounted for the largest share of expenditures, \$1.8 billion.

Indeed, the largest portion of expenditures for pipeline development/expansions in 2000 will come from the big ticket Alliance Pipeline (\$1.3 billion U.S. portion) development. The recent postponement until 2002 of several large Northeast projects has brought the original estimate of expenditures in 2000 down substantially. As a point of reference, at the beginning of 1999 the estimated expenditure figure for pipeline expansions during that year alone approximated \$4 billion. But, because of several postponements and cancellations, by the end of the year only an estimated \$2.2 billion was actually expended.⁶

⁶While 35 major pipeline development project were completed in 1999, adding about 6.6 billion cubic feet per day to national daily pipeline deliverability, the number fell significantly from the 49 completed in 1998 (when 8.5 Bcf/d of new capacity was installed). Of the 52 projects originally scheduled or proposed (by the end of 1998)

Addressing Near-Term Pipeline Capacity Needs

The addition of new pipeline capacity during 1999 and 2000 improved the deliverability of the national natural gas pipeline network and, for the most part, helped minimize the possibility of service constraints occurring on the grid during this winter season. Nonetheless, additional capacity will be needed in the next few years to meet the increasing gas demand in many local areas, particularly in the Northeast, and to handle unexpected disruptions, especially during peak demand periods.

Capacity Tight in Some Areas of Northeast

For instance, while existing pipeline capacity in many parts of the Northeast Region is adequate to meet current demand and, indeed, in some areas (on some pipeline systems) is underutilized on average, during

for completion in 1999, 12 were postponed or delayed until 2000, 3 were put on-hold, and 4 canceled during 1999. Two additional projects were proposed, approved, and completed in 1999 under FERC blanket certificate authorization.

Table SR1. Interregional Pipeline Capacity, 1998 & Estimated 2000, Proposed 2001-2002, and 1999 Average Flows

Receiving Region	Sending Region	Capacity (MMcf/d)			Potential New Capacity Levels				Average Flow (MMcf/d)	Usage Rate On Active Systems ¹ (percent)
					2001		2002			
		1998	Estimated 2000	Percent Difference	End of Year	To be Added	End of Year	To be Added	1999	1999
Canada	Central	66	66	0	66	0	66	0	--	--
	Midwest	2,638	3,329	26	3,329	0	3,329	0	1,456	60
	Western	0	51	--	241	190	241	0	--	--
Total into Region		2,704	3,446	27	3,636	190	3,636	0	1,456	60
Mexico	Southwest	1,090	1,605	47	1,605	0	1,645	40	187	19
	Western	70	448	540	553	130	553	0	22	15
Total into Region		1,160	2,053	77	2,158	130	2,198	40	209	14
Central	Canada	2,320	3,673	58	3,673	0	3,673	0	2,221	95
	Midwest	3,054	3,054	0	3,054	0	3,054	0	2,105	89
	Southwest	8,878	8,878	0	8,878	0	8,878	0	4,097	49
	Western	298	298	0	298	0	298	0	86	29
Total into Region		14,550	15,904	21	15,904	0	15,904	0	8,509	65
Midwest	Canada	3,238	3,267	1	3,267	0	3,267	0	2,849	87
	Central	11,542	12,867	11	13,062	195	13,062	0	7,750	67
	Northeast	2,090	2,090	0	2,090	0	2,090	0	657	32
	Southeast	9,821	9,821	0	9,566	-255	9,566	0	6,088	62
Total into Region		26,691	28,045	5	27,985	-60	27,985	0	17,344	65
Northeast	Canada	2,431	2,956	23	4,070	1,114	4,290	220	2,158	83
	Midwest	4,887	4,887	0	4,887	0	5,887	1,000	3,290	76
	Southeast	5,173	5,480	6	5,480	0	5,710	230	4,045	74
Total into Region		12,491	13,323	7	14,437	1,114	15,887	1,450	9,493	77
Southeast	Northeast	532	532	0	532	0	532	0	13	35
	Southwest	21,002	21,311	1	21,056	-255	21,286	230	14,251	67
Total into Region		21,534	21,844	1	21,589	-255	21,819	230	14,264	67
Southwest	Central	2,424	2,604	7	2,604	0	2,604	0	1,240	54
	Mexico	350	565	61	565	0	565	0	149	43
	Southeast	405	405	0	405	0	405	0	16	23
Total into Region		3,179	3,574	12	3,574	0	3,574	0	1,405	52
Western	Canada	4,412	4,412	0	4,552	140	4,552	0	3,331	78
	Central	1,219	1,219	0	1,219	0	1,469	250	762	98
	Southwest	5,351	5,487	3	5,567	80	5,567	0	2,949	55
Total into Region		10,982	11,118	1	11,338	220	11,588	250	7,043	68
Total Within Lower 48 States		89,427	93,808	5	94,827	1,019	96,757	1,930	59,638	66

¹Usage Rate shown may not equal the average daily flows divided by capacity because in some cases no throughput volumes were reported for known border crossings. This capacity was not included in the computation of usage rate.

MMcf/d = Million cubic feet per day. -- = Not applicable.

Note: Capacity decrease of 255 Mmcf/d in 2001 reflects the probable conversion of one of three parallel (looped) natural gas lines on the Trunkline Gas Company system to a refined petroleum products line.

Sources: Energy Information Administration (EIA). **Pipeline Capacity:** EIAGIS-NG Geographic Information System, Natural Gas Pipeline State Border Capacity Database as of September 2000. **Average Flow:** *Natural Gas Annual 1999*. **Usage Rate:** Office of Oil and Gas, derived from Pipeline Capacity and Average Flow.

peak periods most service providers are heavily, if not fully, utilized. Potential capacity problems lie in several specific areas. For example, in the New York City area, natural gas pipeline capacity appears to be less than is necessary to meet peak demands and several constraint points have developed in recent years. Proposals to relieve these problems have been put forth but their possible implementation is several years away. For

instance, the Cross Bay Pipeline, a joint project between Duke Energy Corporation and The Williams Companies (Transcontinental Gas Pipeline Company), would increase natural gas pipeline capacity into New York City and Long Island by 125 MMcf/d (currently about 650 MMcf/d is available). Only recently filed with the Federal Energy Regulatory Commission (FERC), its proposed earliest in-service date is 2002.

Resolution of the local problem also will necessitate an increase in interstate pipeline capacity feeding into the New York City vicinity, through expansions along existing routes or installation of a new pipeline route(s). The Independence (1,000 MMcf/d), Millennium (714 MMcf/d), and a proposed expansion of the Iroquois Pipeline System (Eastchester expansion, 160 MMcf/d) should provide the additional capacity by 2002, but incremental growth in demand also might be met by less extensive expansions on the existing portions of the Transcontinental Gas Pipeline and Texas Eastern Pipeline systems serving the region.

Similarly, and related to circumstances in the New York city area, the Leidy area of north central Pennsylvania (a major hub with numerous interconnections among major interstate natural gas pipelines) could become a potential constraint point for pipeline gas flowing to the East Coast, particularly the northern New Jersey, New York City area. Current pipeline capacity in the area appears sufficient, but growing demand for gas trading and transport capacity probably will require some expansion of existing pipelines in the area.⁷ The Independence Pipeline and Transco's Market-link projects both include significant development of capacity in the area, while Tennessee Gas Pipeline and National Fuel Gas Supply companies have also indicated tentative plans to expand segments of their respective systems in the area.

The Boston metropolitan complex is another growing capacity constraint area. Demand in the area, especially from developers of gas-fired power generation plants, has been growing and is expected to grow more rapidly over the decade. Currently, most of the gas flowing on the recently completed PNGTS/Maritimes & Northeast pipeline system from Canada to Massachusetts,⁸ about 580 MMcf/d, flows through to southern New England⁹ where it interconnects with the Tennessee Gas Pipeline system. The delayed Tennessee Eastern Express project will expand the area's compression and systems

capabilities by 288 MMcf/d on June 1, 2001. Completion of this project should help alleviate some of the marginal capacity constraint problems that have developed along this route in recent years.

Further in the future, in the same area, the Algonquin Pipeline Company (Duke Energy) has proposed its HubLine, which would be capable of bringing up to 600 MMcf/d to the Boston area from interconnections with a proposed extension (M&NE Phase III project) of the Maritimes & Northeast Pipeline Company system. Although its original planned service date was announced as being 2000-2001 that is an unlikely possibility at this time. The M&NE extension is not scheduled to be completed before late 2002. The HubLine would serve several proposed new power plants in the Boston area and also provide expanded service to existing power plants in the region.

More Exit Capacity for the Central Region

Meanwhile, the Central Region, specifically the Rocky Mountains area, suffers from a lack of receipt or pipeline exit capacity at expanding production areas rather than a lack of deliverability. Rising production levels in Wyoming's Powder River area, as well as in several other Rocky Mountain production zones, are placing pressure on local pipeline systems and regional interstate pipelines to expand their capabilities to move more gas to nearby and distant markets.

In 1999-2000, while several major natural gas gathering system projects were completed in the basin, only 755 MMcf/d more interstate capacity was installed. As a consequence, load factors on local interconnecting interstate pipelines are increasing which, in turn, is stimulating proposals to expand downstream systems and to develop several new pipelines in the region. For instance, the Trailblazer Pipeline System, which connects with Wyoming Interstate Pipeline in northeast Colorado, has recently announced plans to increase its mainline capacity by as much as 300 MMcf/d by 2002 (currently 605 MMcf/d) to accommodate the increase in demand for regional capacity.

Colorado Interstate Gas Company and Williams Gas Pipeline-Central have announced that they each plan to develop new (though similar) pipeline routes from supply interconnections in northeast Colorado to interconnections with affiliated and other interstate systems in southwestern Kansas. These links would serve the growing local natural gas market and provide alternative interstate routes to the Midwestern

⁷Major segments of the Columbia Gas Transmission Company, CNG Transmission Company, National Fuel Gas Supply Corporation, Tennessee Gas Pipeline Company, Texas Eastern Transmission Company, and Transcontinental Gas Pipeline Company systems traverse the Leidy, Pennsylvania area.

⁸The jointly owned PNGTS/Maritimes & Northeast pipeline runs from Wells, Maine, to Dacut, Massachusetts, where it delivers most of its current gas flow. The PNGTS/M&E pipeline receives its gas from the Portland Natural Gas Transmission Pipeline (178 MMcf/d) and the Maritimes & Northeast Pipeline (400 MMcf/d). The former imports western Canadian gas via TransCanada and TransQuebec & Maritimes pipeline systems at the New Hampshire border, while the latter imports Sable Island natural gas from its Canadian partner at the Maine/New Brunswick border.

⁹Several planned gas-fired power generation plants in Maine that were to be served by the new capacity entering the state have yet to be built.

marketplace.¹⁰ Customers in the Midwest and East comprise a ready market for the relatively low-price gas of the Rocky Mountains area.

Western Region is Geared for Expansion

A significant portion of Rocky Mountain natural gas supplies (Colorado, Wyoming, and Utah) is also shipped to the enhanced oil recovery (EOR) markets in southern California and to end-use markets in the Las Vegas area in Nevada. Due to the large demand in these markets, the primary transporter on this route, the Kern River Gas Transmission Company pipeline, is very heavily utilized throughout the year. Still, there is growing interest in directing some of the expanding Powder River Basin production to the California/Nevada marketplace as well. There has not been any significant expansion on any of the several pipeline systems that transport natural gas from the Rocky Mountains area and the Permian (Texas) and San Juan basins (Colorado and New Mexico) into the Western states since 1993.¹¹ But there are signs that during peak-demand periods additional pipeline capacity will soon be needed to handle growing demand swings for natural gas in the region.

Reacting to market indicators, Kern River Gas Transmission Company has proposed a system expansion of 122 MMcf/d from Wyoming to California for 2002 and is testing market demand (through open-season exercises) for a further expansion of 380 MMcf/d in 2003. It is also studying the feasibility of building an extension to its system, which now ends in Kern County, California, to the city of Long Beach, California. Currently underway is the development of an additional natural gas pipeline to serve the region, the 90 MMcf/d Questar Pipeline Company Southern Trails

(converted oil) pipeline system from the San Juan Basin area to the Los Angeles, California, market.¹² It is scheduled for completion in 2001.

The need for improved capability may not rest entirely on the interstate pipeline system. For instance, although the physical capabilities of the delivery point at El Paso Natural Gas's Ehrenberg, Arizona (southern system) station could permit 1,410 MMcf/d to be delivered, the Southern California Gas Company (SoCal) system is capable of receiving only 1,210 MMcf/d. Expansion of the SoCal system, and perhaps the Pacific Gas & Electric system that receives supplies in southern California, may also be necessary if California's natural gas markets continue to grow.

Midwest Capacity Meets Current Needs

In contrast, in the Midwest Region, there are not any major bottlenecks or capacity constraint points currently observable. In fact, since 1990, the level of pipeline capacity into the region has increased by 16 percent, a percentage growth exceeded only by that into the Northeast. While natural gas consumption has grown steadily during the past decade, new pipeline construction has kept pace in the region. Indeed, during the past several years the completion of several major projects (for example, Northern Border's 700 MMcf/d expansion completed in 1998 and Viking Gas Transmission's 90 MMcf/d in 1998-99) has kept supply and demand in the region relatively in balance (some would argue that a small capacity surplus already exists in some areas of the region). However, while the region will see a major installment of new service this year with the completion of the Alliance Pipeline, the Northern Border system expansion from Iowa to Illinois (195 Mmcf/d) and extension of its service territory into Indiana (545 MMcf/d), has been delayed till 2001.

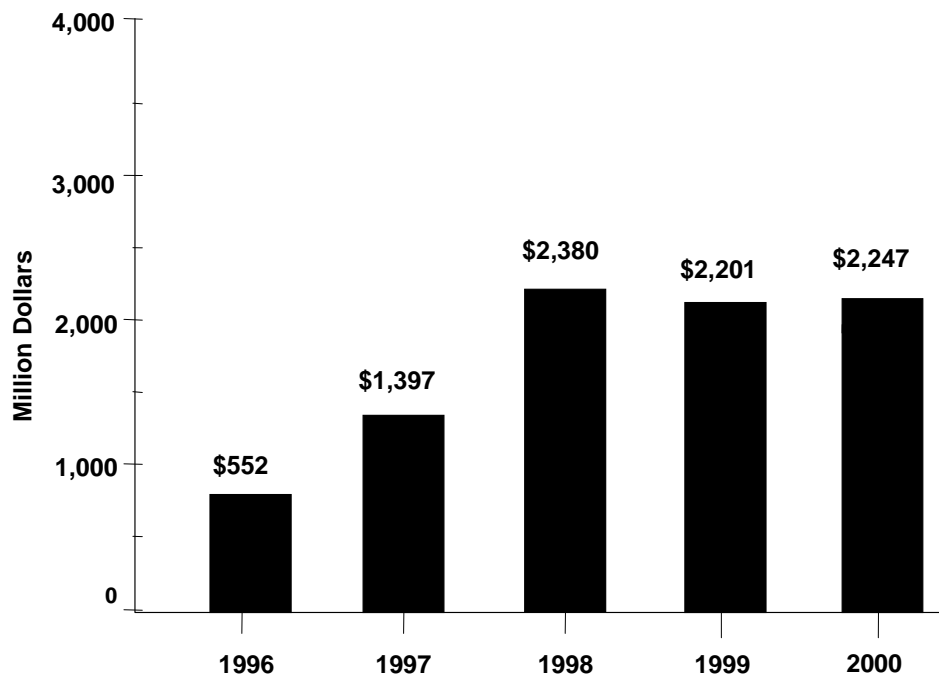
The growth in natural gas consumption in the region, for the most part, has been met by an increase in capacity and gas imported from Canada. These pipeline routes have experienced very high capacity usage levels (90+ percent) year round, while the interstate pipelines transporting gas from the Southwest Region experienced a decline in usage during the first two-thirds of the decade. In the past several years, however, because of an increased demand for natural gas and a narrowing of price differences between U.S. and Canadian natural gas prices, lines from the Southwest

¹⁰The Colorado Interstate Gas COCO project would consist of a 400 mile, 500 MMcf/d pipeline, while the Williams' Frontier pipeline project would be 320 miles long and capable of carrying 526 MMcf/d. Both projects could be completed in 2003.

¹¹Except for the interstate Mojave and Kern River Gas Transmission systems, which primarily serve the cogeneration/power plant and enhanced oil recovery (EOR) markets in southern California, most gas pipeline transportation service within California is dominated by Pacific Gas and Electric Company and Southern California Gas Company, two of the largest local distribution companies (LDCs) in the nation. The two companies play dual roles as local distributors for their core customers and open-access transporters for major shippers, such as industrial users and electric utilities, within their respective service territories. They also serve as intrastate pipelines with interconnections to the other LDCs serving the state. Southern California Gas Company provides distribution service in southern California, including transport of supplies to San Diego Gas & Electric Company and Southwest Gas Company, a major LDC in the area. Pacific Gas and Electric claims northern California as its service territory but acts also as a vehicle to move some Canadian gas supplies to southern California.

¹²Also, the El Paso Company, which delivers West Texas and San Juan Basin natural gas to the Arizona/California market, has recently filed with FERC for approval of a plan to convert and integrate an unused oil pipeline into its existing southern system. While the project will enhance the system's overall integrity and efficiency, it entails no increase in capacity.

Figure SR5. Natural Gas Pipeline Construction Expenditures, 1996-2000 (Estimated)



Note: Only the cost of the U.S. portion of the Alliance Pipeline and the Vector Pipeline Projects were included in the total expenditures for 2000. Including the Canadian portion of these projects would increase expenditures by \$1.6 billion.

Sources: Energy Information Administration (EIA), EIAGIS-NG Geographic Information System: Natural Gas Pipeline State Border Capacity Database as of September 2000; Natural Gas Proposed Pipeline Construction Database, as of September 2000. compiled from Federal Energy Regulatory Commission filings and various industry news sources.

are once again becoming more heavily utilized. Still, on routes into the Midwest region, there appears to be available capacity and these lines are not expected to be capacity constrained in any measure over the next several years.

The currently planned new capacity from Canada into the Midwest could possibly exceed the projected natural gas needs of the region. Indeed, several projects have been proposed that would ship up to 1,450 MMcf/d of the natural gas coming into the Midwest (or the equivalent of about 77 percent of the proposed level of new capacity into the region) to the Northeastern United States and/or (Ontario) Canada. Part of this 1,450 MMcf/d export capacity will be supported by expected increases in flows (and some capacity expansions) from pipeline routes currently delivering gas from the U.S. Southwest (Natural Gas Pipeline Company of America, Panhandle Eastern Pipeline Company, ANR Pipeline Company, Midwestern Gas Transmission Company and Trunkline Gas Company).

In the Midwest Region, the emphasis currently is upon proposals to transship and/or redistribute the nearly 800 billion cubic feet (Bcf) of natural gas a year that could flow on the additional pipeline capacity now directed into the northern Illinois area by the Northern Border Pipeline system extension (1998) and the new Alliance Pipeline system (2000). For instance, currently there are at least five proposals to move some of the new pipeline supplies to the southern Wisconsin (Milwaukee area).¹³

¹³The Horizon (370 MMcf/d), Guardian (730 MMcf/d), Lake Michigan (up to 1,400 MMcf/d), and ANR Wisconsin Loop (270 MMcf/d) are the major proposals currently approved or awaiting regulatory review. At this point in time it is uncertain how many of these proposals will actually be implemented. Not all will be. The cumulative capacity represented in these proposals total about 125 percent more gas supplies than will be available on the new pipelines supplying the region.

Outlook

Absent an extremely cold upcoming heating season and other unforeseen situations (see box), the nation's natural gas interstate pipeline infrastructure appears more than adequate to meet the differing regional market demand requirements that are likely to be placed upon it. Over the past decade, a number of new pipelines have been built to access new production areas and new markets, and a large number of existing pipelines have been expanded to increase the level of service to an expanding customer base.

By the end of 2000 interregional natural gas pipeline capacity will have grown by 27 percent (20 Bcf/d) since 1990, with 5 percent of the additions installed since 1998 (Table SR1). At least half of that new capacity was built to accommodate shifts in supply sources. Indeed, except during periods of very extreme weather conditions, or disruptions caused by isolated pipeline outages, there has not been any sustained disruptions of the network since the mid 1970's.

Beyond what has already been proposed to be built, new pipeline development can be expected where new supply sources are being tapped, such as deep-water development in the Gulf of Mexico and expanding growth in coal-bed methane production in several areas of the country. In addition, since almost all of the many planned new electric power plants throughout the country are slated to be gas-fired, new lines and additional capacity will have to be developed to accommodate these as well. All of this potential need provides a favorable outlook for new natural gas pipeline development over the near term. And, based upon past experience, there is no reason to believe that the U.S. natural gas pipeline industry will not be capable of financing and installing the additional infrastructure needed to accommodate the anticipated growth.

Possibility Becoming Reality - Unanticipated Outages

An example of how quickly a balanced situation can be reversed occurred on August 19, 2000, when an explosion disrupted service on the southern portion of the El Paso Natural Gas Company system. Three lines (two 30-inch and one 26-inch pipeline) at the Pecos River crossing, located in the southeast corner of New Mexico, were placed out of commission when one of the 30-inch lines blew and the other two lines were shut down because of peripheral damage. As a result, 1.2 Bcf/d, out of a normal 2.0 Bcf/d (or about 6 percent of the total natural gas pipeline capacity entering Arizona and California) of natural gas flowing along El Paso's southern route to its Arizona and California markets, was significantly affected for several weeks (Two months after the incident the most severely affected pipeline segment had yet to be replaced. Nevertheless, flow levels at the site are reported running at about 85 percent of previous levels). The loss was a major shock to supplies of natural gas in the Western Region, particularly in California, Arizona, and New Mexico.

The reaction to this problem demonstrated the potential capability of the network to respond to supply disruptions with transportation adjustments and routing alternatives to accommodate a sudden drop in supply from any single source. With the disruption to flow along one segment of the El Paso system, gas prices in southern California soared at least temporarily, but a combination of market adjustments avoided widespread shortages. The system relied on alternative transportation, gas from storage, or other non-natural-gas remedies such as switching to other fuels to supplement the loss of natural gas supplies.

For instance, during the disruption, a portion of incremental supplies for customers in the southern portion of California came from storage facilities located in northern California in the San Francisco area. These facilities, with interconnections to the PG&E system (three of the five facilities are owned by PG&E), were used to increase supplies to the local area, displacing supplies that normally would flow on the southern PG&E system that receives gas from Transwestern and El Paso pipeline systems at the southern California border. Access to storage supplies in southern California and western New Mexico also helped mitigate the situation.

Although there is no guarantee that the network and supply system will always be capable of meeting requirements under all scenarios, it does suggest a resiliency in the system, at least in the short term, to deal with major disruptions.

Natural Gas Winter Outlook 2000-2001

By James M. Todaro

This article is based on the Winter Fuels Outlook published in the 4th Quarter *Short-Term Energy Outlook* and discusses the supply and demand outlook from October 2000 through March 2001. For a more complete picture of the situation facing other heating fuels (heating oil and propane), see *Short-Term Energy Outlook* (October 2000, pages 1-16).

This winter is expected to bring significantly higher natural gas prices than those seen during the previous winter season. The main reasons for this projected outcome are: an expected increase in space heating demand compared to last winter (the warmest on record), a below average natural gas stock level, and prices at the wellhead and on the spot market in October that are close to double those of last year. In addition, compared to last year the NYMEX futures contracts for November and December delivery were trading at prices that were more than 60 percent higher in mid-October (see Figure HI5, page 5). Coupled with the prospect of a more normal winter season bringing colder temperatures than last winter, consumers are

likely to incur higher natural gas heating bills this winter compared to their bills in the previous heating season. Nonetheless, supplies of natural gas are expected to be adequate to meet winter demand.

Primarily because of the strong likelihood of higher natural gas prices this winter, expenditures by residential consumers for heating (or other energy uses) this winter are likely to be relatively large, especially in comparison to costs seen in the previous three winters. Table SR1 below assumes the return of normal weather and illustrates the impact of these higher natural gas costs on winter heating bills for a typical household in the Midwest.

Table SR1. Illustrative Midwest Consumer Prices and Expenditures per Household, for Natural Gas in a Normal Winter¹

	<u>1997-1998</u>	<u>1998-1998</u>	<u>1999-2000</u>	<u>2000-2001</u>
	Actual	Actual	Actual	Base Forecast
Natural Gas (Midwest)				
Consumption (mcf)	82.4	84.5	81.7	90.9
Average Price (\$/mcf)	6.56	6.27	6.61	8.58

¹ Normal degree-days, as defined for this analysis, are calculated by EIA on a month-to-month basis in such a way as to incorporate temperature trends identified through research done by the National Oceanographic and Atmospheric Administration.

Demand

A return to more normal winter weather will increase demand

Total natural gas demand is expected to move higher this winter, averaging 70.75 billion cubic feet (Bcf) per day, an increase of 5.5 percent compared to last year's daily average of 67.06 Bcf per day. Contributing to the growth in winter demand is the increase in gas space-heating customers (about 1 percent). Most of the increase is related to assumptions of a return to more normal weather patterns. Milder weather last winter resulted in gas-weighted heating degree-days that were almost 14 percent below normal nationally, while several Midwestern areas experienced weather as much as over 18 percent warmer than normal. As a result, winter consumption in residential and commercial markets is expected to average 21.2 and 12.2 Bcf per day, respectively, up about 11.1 percent and 8.5 percent from the previous winter's consumption (Figure SR1).

Supply

The level of natural gas in storage is below the 5-year average

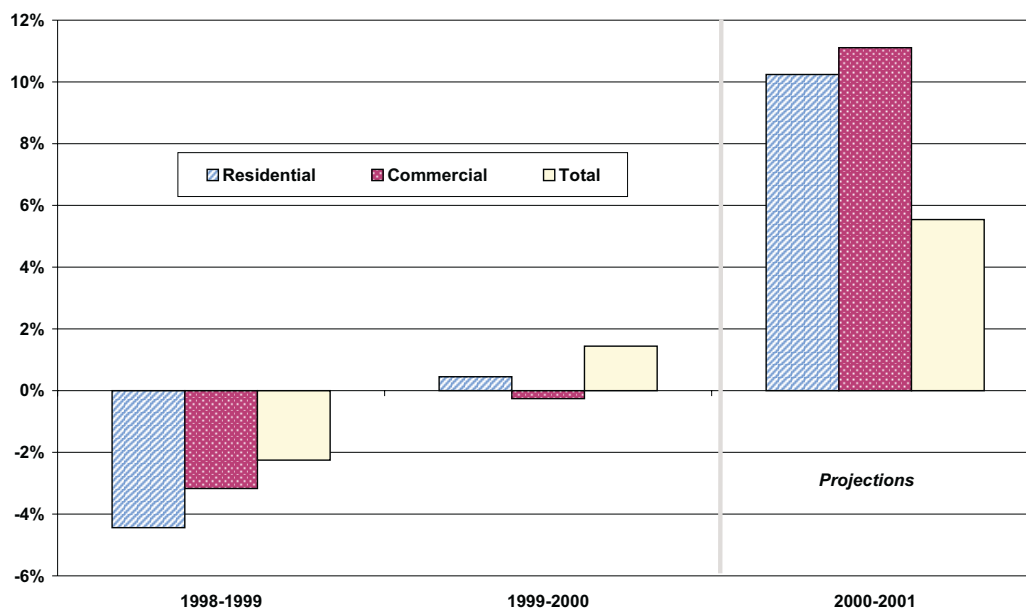
Domestic gas production is expected to average 51.84 Bcf per day during the heating season, up slightly from the 51.29 Bcf per day during the previous winter. Drilling activity for both oil and gas had dropped sharply in 1999 in reaction to the 1998 decline in the price of oil and natural gas. The monthly rig count in 1999 averaged 625 compared 943 in 1997. Rig counts have increased sharply in 2000 with rise in the price of crude oil and natural gas. By mid-October, the rig count had reached 1054, with 844, or 80 percent, of the rigs dedicated to natural gas exploration. The sharp drop in drilling last year and the lead time needed to bring properties to production has been a concern of many in the industry this past spring and summer.

Working gas storage at the beginning of the heating-season (November 1) is estimated to have reached 2,760 Bcf, about 7.5 percent below EIA's 5-year average of 2,985 bcf (Figure SR). Storage plays a critical role in meeting increased seasonal demand. The regional distribution associated with this estimated volume is East Consuming at 1,760 Bcf, Producing at 680, and West Consuming at 320 Bcf. The East Consuming region, which is most dependent on storage inventories during the heating season, is currently estimated to have 96 percent its active storage capacity already full. The Consuming West region, which contains only 15 percent of all active capacity compared to East's 56 percent, is 63 percent full. Comparing these current estimates with the previous 5-year average (1995-99) for the end of September, reveals that the East region is 112 Bcf or 6.5 percent below while the West is 57 Bcf or 16 percent below the earlier average. The producing region is estimated to be 88 percent (75 Bcf) below the 5-year average, storage activity in this region is oriented more to production operations, and this inventory does not serve as a prime gas source to satisfy peak load demand during the heating season.

During this heating season, net withdrawals are expected to average 9.07 Bcf per day. Due to lower level of working gas on hand at the beginning of this heating season, end-of-season stocks of working gas are projected to be 888 Bcf, which is substantially more than the record low of 758 Bcf of working gas that remained at the end of March 1996.

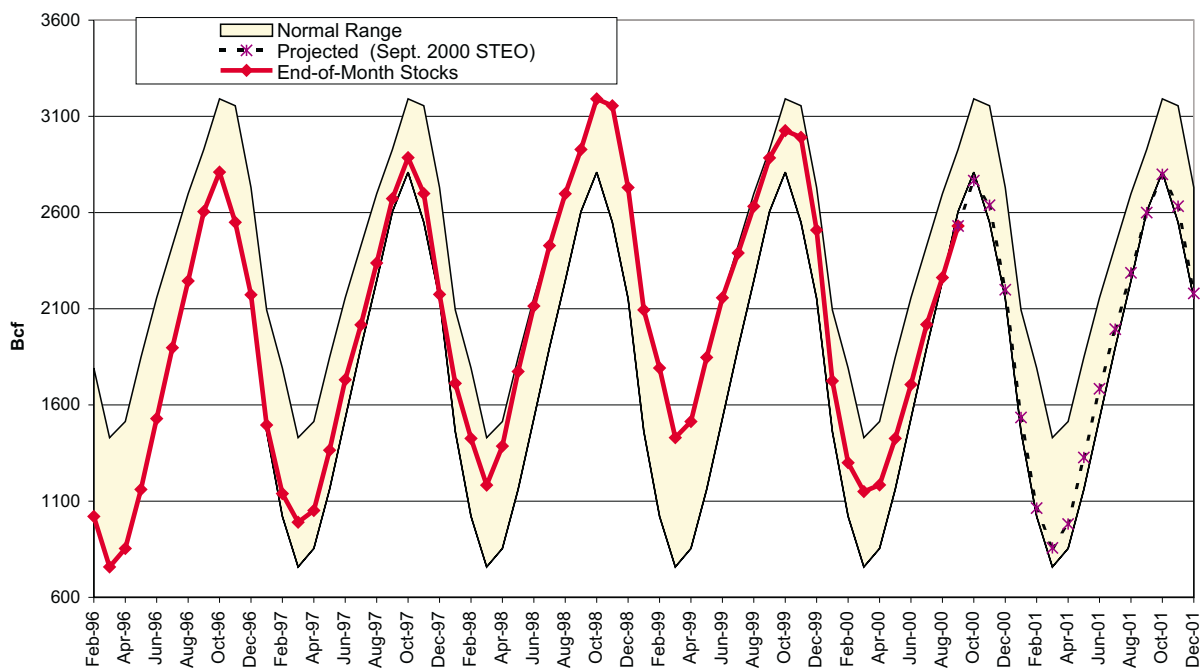
Natural gas imports are expected to average 10.51 Bcf per day, 14 percent of demand, compared to last year's 9.57 Bcf per day or 12 percent of demand. During the winter months, net imports are about 10 percent higher than flows during the rest of the year and usually increase to full pipeline capacity. That capacity, is scheduled to increase at the end of 2000 when the Alliance Pipeline will begin carrying gas from western Canada to the Midwest. However, this pipeline is not currently expected to reach its full capacity of 1.3 Bcf per day until later in the heating season.

Figure SR1. Change in Winter Natural Gas Demand



Source: Energy Information Administration Natural Gas Monthly (September 2000), and the Short-Term Energy Outlook (October 2000).

Figure SR2. End-of-Month Working Gas in Underground Storage



Source: History: EIA; Projections: Short-Term Energy Outlook, October 2000.

Price

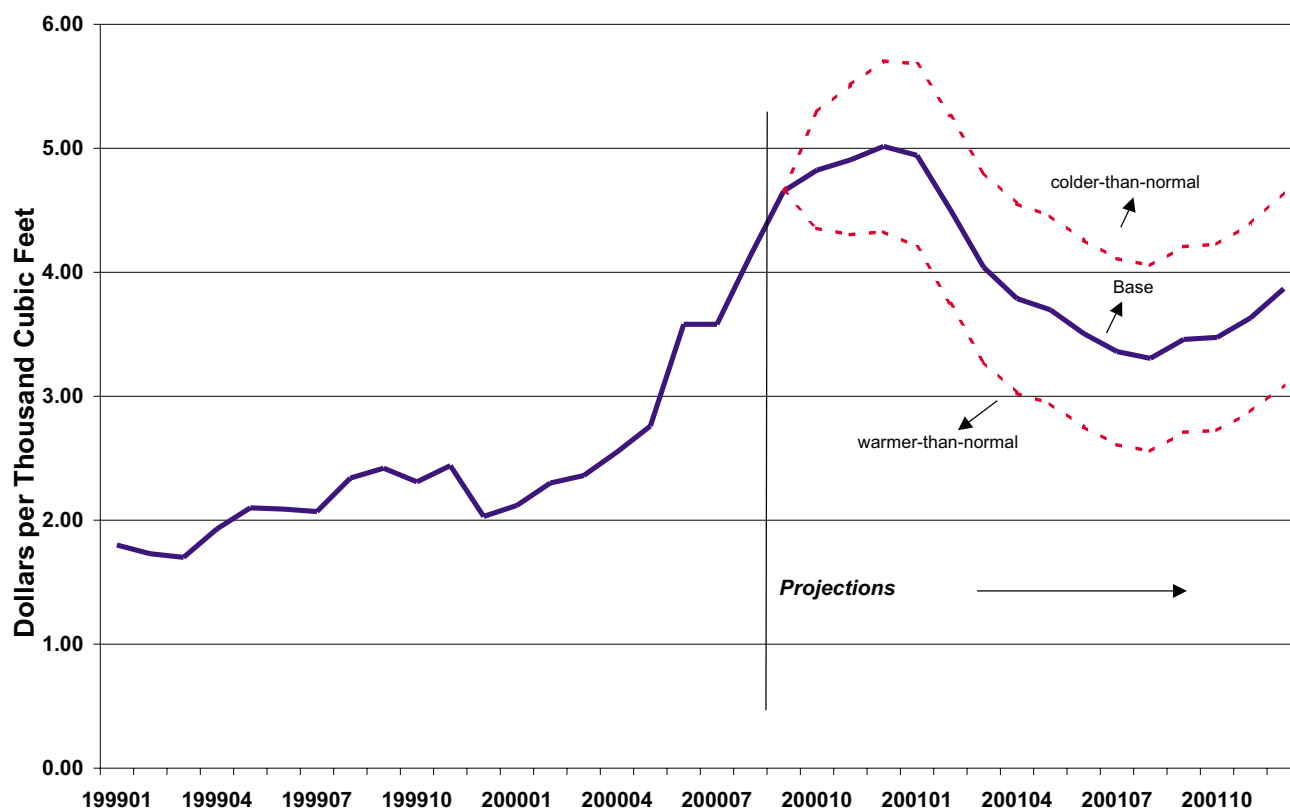
Much higher wellhead prices and normal weather will see residential expenditures rise

Natural gas wellhead prices are projected to rise sharply to an average of \$4.48 per million cubic feet (Mcf) this winter, almost double the \$2.26 per Mcf average price recorded during the 1999-2000 heating season (Figure SR 3). Several factors account for this sharp increase, including: below average stock levels resulting from lagging domestic production in the face of increasing demand from the strong U.S. economy (despite increases in rig counts), increases in summer power-generation demand, which has constrained the inventory build during the refill season, the influence of the rise in crude oil prices on fuel switching and, hence, prices; and inventories of other winter fuels (heating oil in the Northeast and propane in the Midwest) also being below average. It should be noted

that mild winter weather as well as higher inventories depressed wellhead prices during most of last year's heating season.

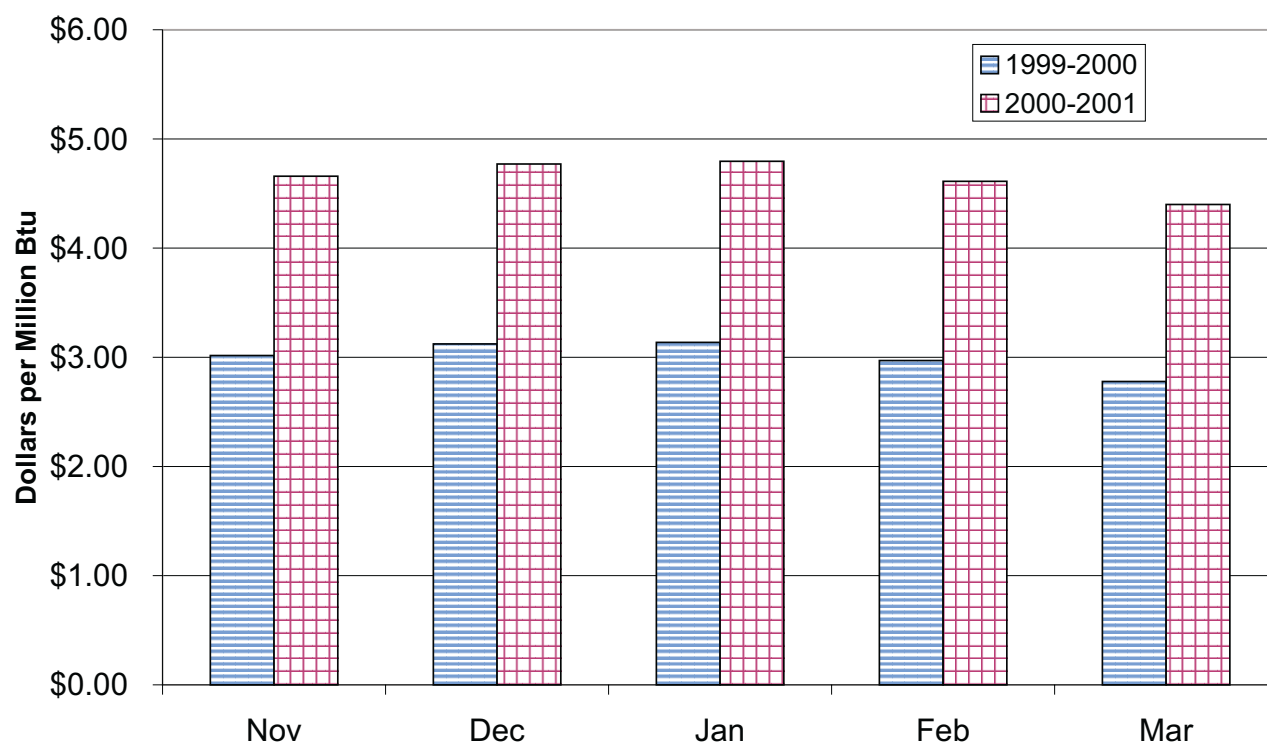
In mid-October of this year, natural gas prices on the NYMEX futures market for the upcoming winter season were trading at prices that were at least 60 percent above those of last year although prices recently have returned to less than \$5.00 per MMBtu (Figure SR4). Prices paid by residential consumers are expected to move up sharply, averaging \$8.58 per Mcf in the Midwest, up 30 percent from last winter's average of \$6.61 (Table SR1). This would be the largest percentage increase of major space-heating fuels to the residential sector and 34 percent above the previous 5-year average of \$6.40 per Mcf. Consumers could see slightly higher or lower prices during the winter, depending on whether abnormally cold or warm conditions develop.

Figure SR3. Natural Gas Wellhead Prices: Base Case and Weather Scenarios



Source: History: EIA; Projections: Short-Term Energy Outlook, October 2000.

Figure SR4. Natural Gas Futures Prices for Winter Months 1999-2000 and 2000-2001, on October 25, 1999 and 2000



Source: Futures Prices Commodity Futures Trading Commission, Division of Economic Analysis, 1999 and 2000.

Conclusion

The actual outcome regarding the demand, supply, and price of natural gas for this winter will depend very much on the weather. Natural gas commodity or wellhead prices, particularly spot and futures prices, can show high volatility on a daily basis and are very sensitive to shifts in working gas in storage, which is

critical for meeting winter demand peaks. For residential gas customers, increases in wellhead costs are usually passed on with a time lag that can significantly reduce the volatility seen in the commodity market because of monthly billing cycles and various state regulatory functions. Although the higher costs are recovered from residential users, the typical residential gas bill shows less severe price spikes compared to those of other fuel users.

Highlights

This issue of the *Natural Gas Monthly* contains estimates of natural gas data through October 2000 for many data series at the national level. National-level natural gas prices are available through June, July, or September, depending on the price series. Also, State-level data are generally available through July 2000.

Highlights of the most recent data estimates contained in this issue are:

- The amount of working gas in underground storage at the end of October 2000, in place for the beginning of the heating season on November 1, is 2,757 billion cubic feet, 8 percent lower than the average for the previous 5 years.
- The average natural gas wellhead price from January through September 2000 is \$3.07 per thousand

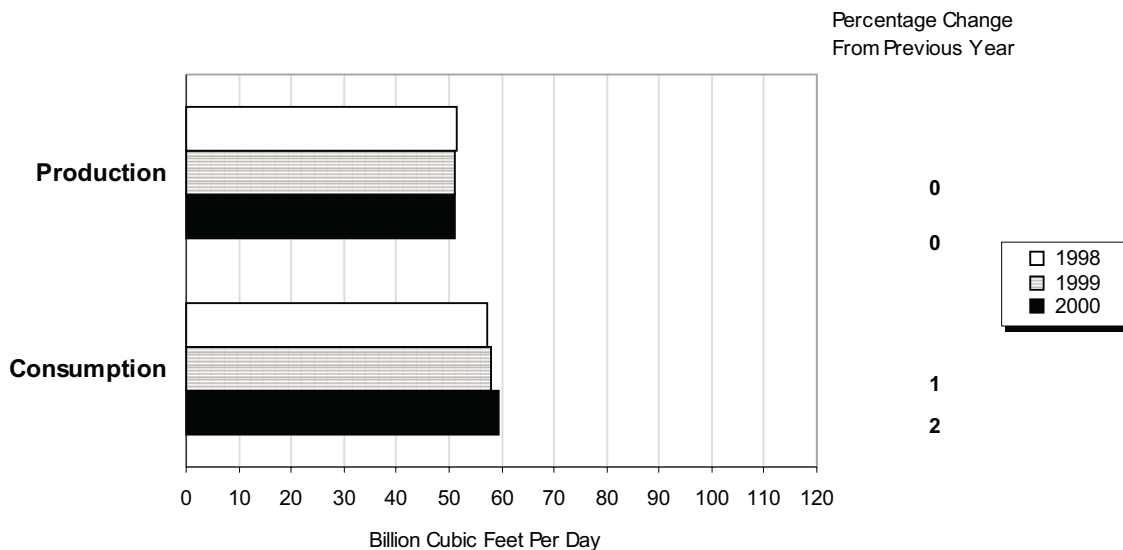
cubic feet, more than \$1 higher than for the same period in 1999.

- Cumulative dry natural gas production from January through October 2000 is nearly the same as in 1999.
- Cumulative end-use natural gas consumption through October 2000 is running 2 percent ahead of consumption during 1999.

Supply

Dry natural gas production from January through October 2000 is estimated to be 15,590 billion cubic feet or 51.1 billion cubic feet per day (Figure HI1). As winter approaches, production has been nearly the same as last year when the daily rate through October 1999 was 51.3 billion cubic feet. For the

Figure HI1. Average Daily Rate of Natural Gas Production and Consumption, January-October, 1998-2000



Source: Table 2.

month of October 2000, production is 1,592 billion cubic feet or 51.4 billion cubic feet per day, a 1-percent increase over the daily rate during September 2000 (Table 1).

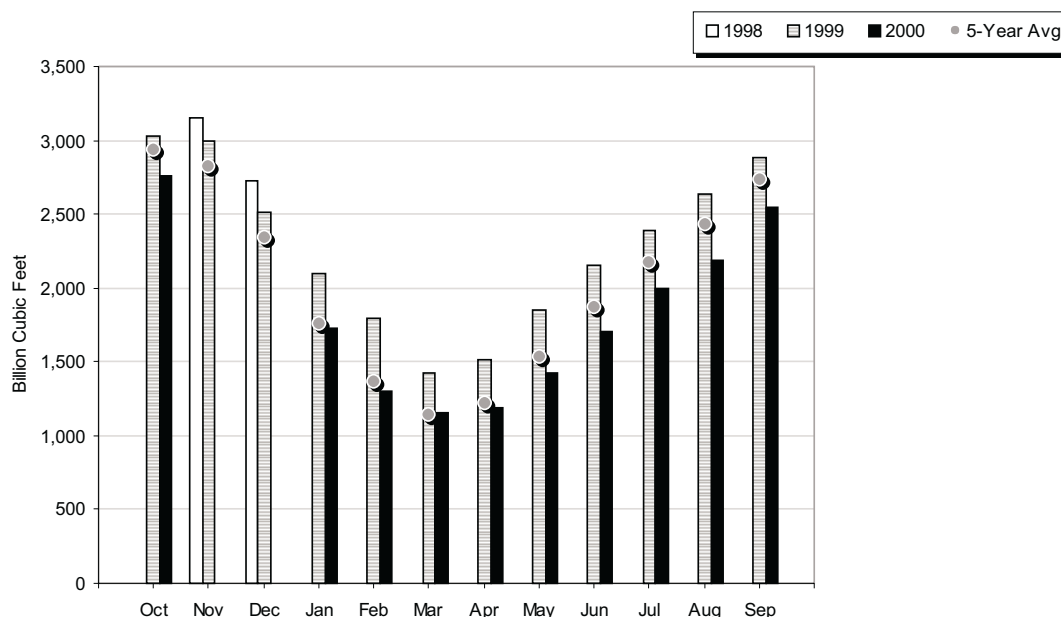
Net imports from January through October 2000 are estimated to be 2,852 billion cubic feet, 24 billion cubic feet (less than 1 percent) higher than for the same period last year (Table 2). Net imports for the month of October are estimated to be 284 billion cubic feet, 3 percent less than the 294 billion cubic feet in October 1999. The daily rate for October 2000 is 9.2 billion cubic feet, which is 5 percent below the daily rate of 9.7 billion cubic feet in September 2000.

U.S. import and export data by type and country are available through August 2000. Imports of liquefied natural gas (LNG) account for 5 percent of total imports as estimated for January through August 2000, compared with 4 percent in 1999. Cumulative U.S. exports from January through August 2000 are estimated to be 152 billion cubic feet, with 43 percent ex-

ported to Mexico via pipeline and the remaining volume exported nearly equally to Canada via pipeline and to Japan via tanker as LNG. Cumulative U.S. exports have increased 43 percent over exports during the same period in 1999, in part, as a result of electric utility demand in northern Mexico.

Storage plays a critical role in meeting winter demand. At the start of the 2000-2001 heating season on November 1, total working gas in underground storage is estimated to be 2,757 billion cubic feet, 8 percent below the 5-year average (1995-1999) for the beginning of the heating season (2,982 billion cubic feet) (Figure HI2 and Table 10). Even with this lower level of working gas, the amount in storage seems more than adequate to meet demand this winter given the average net withdrawals that have occurred during the past 5 winters. According to regional data, the East is particularly well positioned for the winter having reached 1,763 billion cubic feet of working gas in storage as of October 27, only 3 percent lower than the 5-year average for the region.¹

Figure HI2. Working Gas in Underground Storage in the United States, 1998-2000



Note: The 5-year average is calculated using the latest available monthly data. For example, the December average is calculated from December storage levels for 1995 to 1999 while the January average is calculated from January levels for 1996 to 2000. Data are reported as of the end of the month, thus October data represent the beginning of the heating season.

Source: Form EIA-191, "Underground Natural Gas Storage Report," Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and Short-Term Integrated Forecasting System.

¹ State-level storage data from Table 14 are extended using regional data from the American Gas Association to provide more up-to-date estimates of storage information. See the Energy Information Administration's *Weekly Natural Gas Market Update*. <http://www.eia.doe.gov> (November 6, 2000).

End-Use Consumption

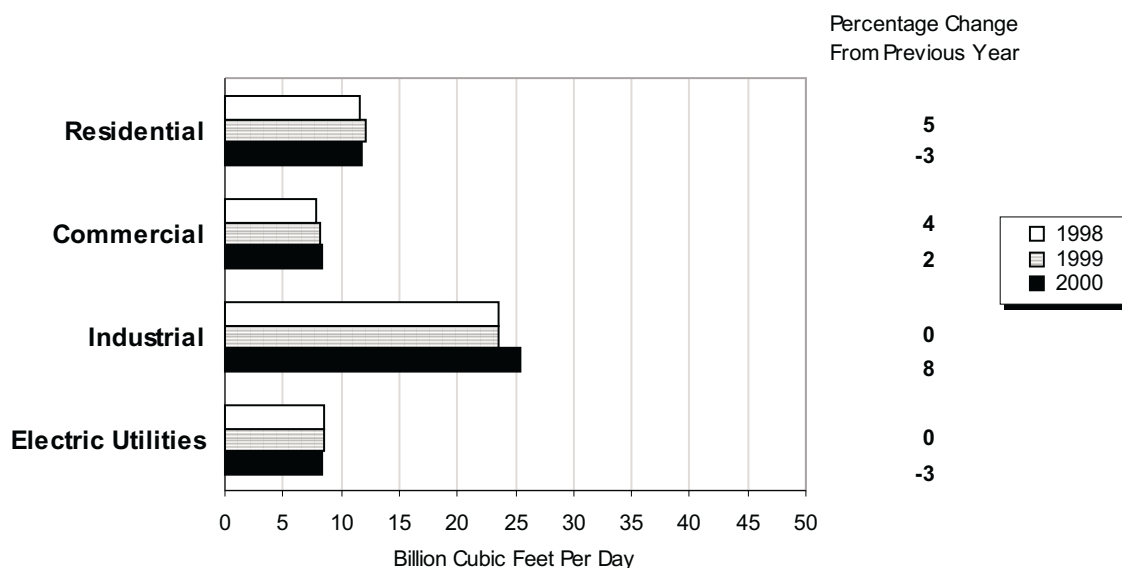
Cumulative end-use consumption of natural gas for January through October 2000 is estimated to be 16,535 billion cubic feet or 54.2 billion cubic feet per day, 2 percent above the daily rate for the same period of 1999 (Table 3). The increase is largely driven by growth in the industrial sector.

Industrial natural gas consumption through October 2000 is estimated to be 7,731 billion cubic feet or 25.3 billion cubic feet per day. This is 8 percent above the daily rate for the same period of 1999 (Figure HI3). Industrial consumption so far in 2000 has been higher in every month compared with that of 1999. Consumption estimates for April through August are 10 to 15 percent higher than in the corresponding months of 1999. Generally, the increase in industrial consumption may reflect increases in gas used in manufacturing processes as well as gas used by nonutility generators. As the restructuring of the electric utility industry proceeds, many previously regulated generating plants have been sold to entities that are not regulated utilities. These facilities are classified as nonutility generators, and the gas that they consume is reported as industrial consumption rather than electric utility consumption.

Estimates of natural gas consumption in the residential and commercial sectors for January through October 2000 are both within 2 percent of the 1999 levels, but are moving in opposite directions. Cumulative residential consumption is estimated to be 3,598 billion cubic feet or 11.8 billion cubic feet per day. This rate is 2 percent below that of 1999. Residential users have been consuming less natural gas in every month thus far in 2000 compared with 1999 except for February. In the commercial sector, cumulative consumption through October 2000 is estimated to be 2,530 billion cubic feet or 8.2 billion cubic feet per day. This rate is 2 percent higher than in 1999 for the same period. Most of the growth occurred during May through July when commercial consumption was 13 to 20 percent higher than in 1999.

Data for natural gas consumption by electric utilities are available through July 2000. Cumulative consumption in this sector is estimated to be 1,765 billion cubic feet or 8.3 billion cubic feet per day. For any particular month in 2000, electric utility consumption has been anywhere from 16 percent lower to 14 percent higher than in the corresponding month of 1999. The cumulative daily average consumption rate is 2 percent lower compared with the rate through July 1999.

Figure HI3. Average Daily Rate of Natural Gas Deliveries to Consumers, January-October, 1998-2000



Note: Electric utilities reflect deliveries for January-July.

Source: Table 3.

Prices

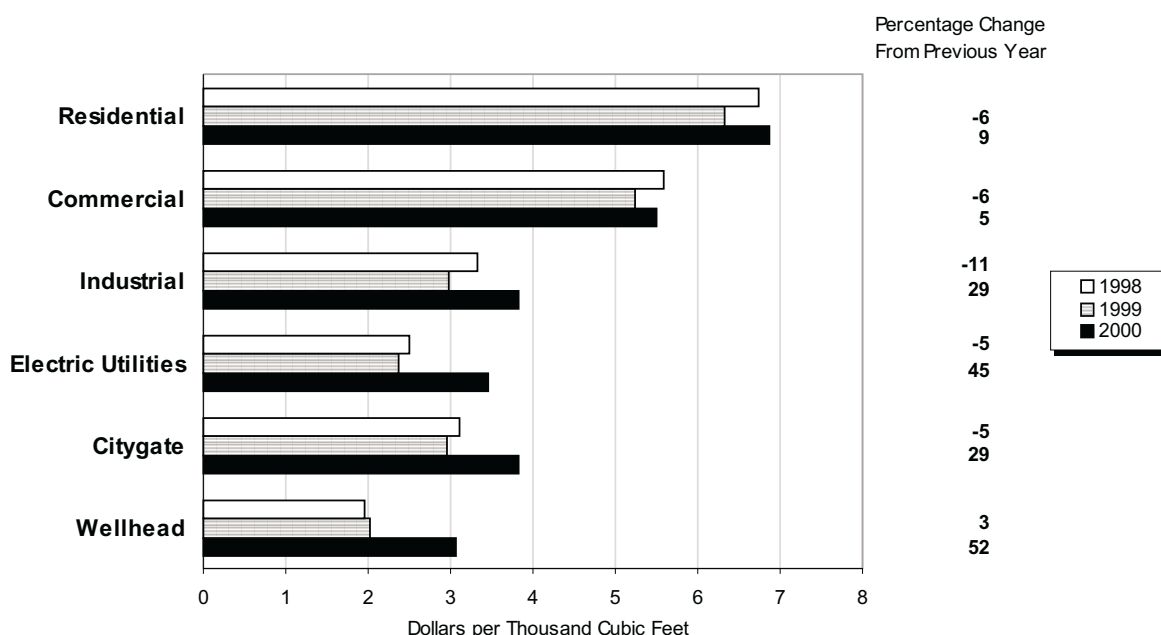
The average natural gas wellhead price for the first three-quarters of 2000 is estimated to be \$3.07 per thousand cubic feet, 52 percent higher than the average of \$2.02 for the same period in 1999 (Table 4 and Figure HI4). Storage levels that have lagged those of recent years and predictions of a return to normal weather for the 2000-2001 winter have contributed to the climb in the wellhead price this year. After 2 months of slight declines, the average wellhead price rose sharply to an estimated \$4.26 per thousand cubic feet in September 2000. This is 16 percent higher than the estimate for August 2000 and 76 percent higher than in September 1999.

In the futures market, the settlement price on the near-month futures contract (November) at the

Henry Hub reached an historic high of \$5.630 per million Btu on October 12, and then entered the longest period of sustained decline since this past summer (Figure HI5). The November contract closed at \$4.541 per million Btu on October 27, more than \$1 below its peak. Factors influencing the decline include the generally mild weather during October that allowed higher-than-expected net injections into storage during the middle 2 weeks of the month.² Still, the closing price for the November 2000 contract is substantially higher than that of the November 1999 contract, which closed at \$3.092 per million Btu..

Estimates of cumulative average prices³ paid for natural gas by end users in 2000 are all higher than in 1999. The average prices paid by residential and commercial users for January through July 2000 are \$6.88 and \$5.49 per thousand cubic feet, respectively. For

Figure HI4. Average Delivered and Wellhead Natural Gas Prices, January-July, 1998-2000



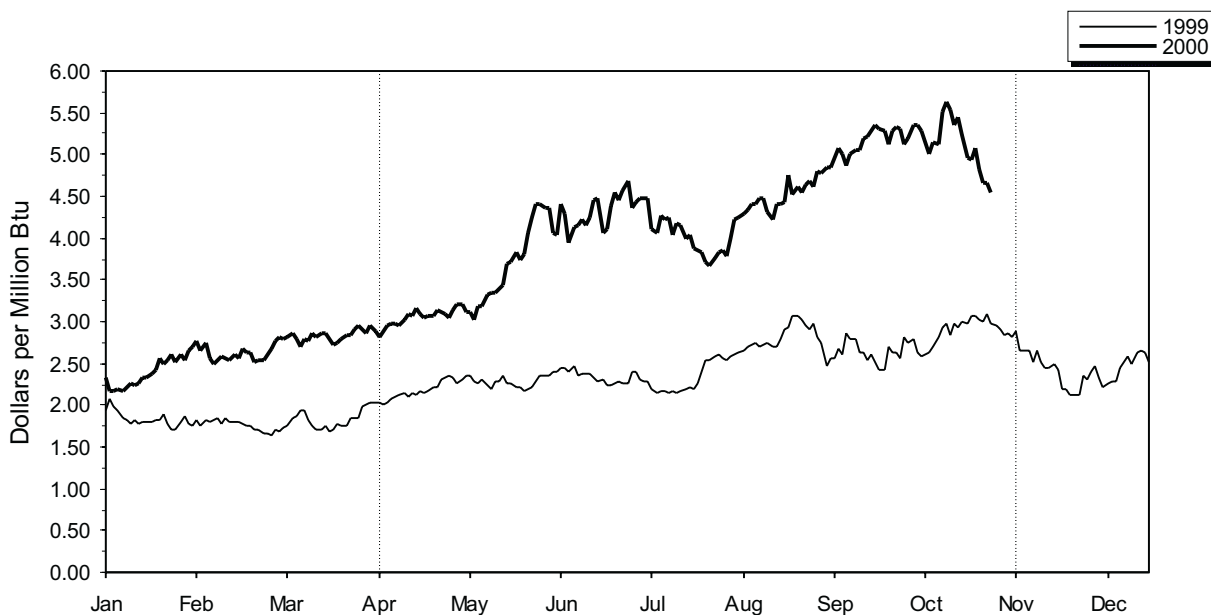
Note: Commercial and industrial average prices reflect onsystem sales only. The reporting of wellhead prices is 2 months ahead of the reporting of city gate, residential, commercial, and industrial prices. The reporting of electric utility prices is 1 month behind the reporting of city gate, residential, commercial, and industrial prices.

Source: Table 4.

2 Weekly estimates of storage activity are provided by the American Gas Association and used in the Energy Information Administration publication, *Weekly Natural Gas Market Update*. <http://www.eia.doe.gov> (October 30, 2000).

3 End-use prices in the residential, commercial, and industrial sectors are for onsystem gas sales only. While monthly onsystem sales are nearly 100 percent of residential deliveries, in 2000 they have averaged 65 percent of commercial deliveries and only 16 percent of industrial deliveries (Table 4).

Figure HI5. Daily Futures Settlement Prices at the Henry Hub



residential users, this is an increase of \$0.55 per thousand cubic feet or 9 percent compared with 1999. For commercial users, it is an increase of \$0.26 per thousand cubic feet or 5 percent.

The wellhead price constitutes a larger portion of the price paid for natural gas in the industrial and electric utility sectors compared with that of the residential and commercial sectors. Thus, the rising wellhead prices are having a greater direct impact on industrial

and electric utility prices. The cumulative average price paid for natural gas by industrial users for January through July 2000 is \$3.83 per thousand cubic feet, \$0.85 per thousand cubic feet or 29 percent higher than during the same period last year. Data on electric utility prices lag those of the other sectors by 1 month. The cumulative average price paid for natural gas by electric utilities for January through June 2000 is \$3.45 per thousand cubic feet, \$1.01 per thousand cubic feet or 45 percent higher than during the same period in 1999.

Table 1. Summary of Natural Gas Production in the United States, 1994-2000
(Billion Cubic Feet)

Year and Month	Gross Withdrawals	Repressuring	Nonhydrocarbon Gases Removed ^a	Vented and Flared	Marketed Production (Wet)	Extraction Loss ^b	Dry Gas Production ^c
1994 Total	23,581	3,231	412	228	19,710	889	18,821
1995 Total	23,744	3,565	388	284	19,506	908	18,599
1996 Total	24,114	3,511	518	272	19,812	958	18,854
1997 Total	24,213	3,492	599	256	19,866	964	18,902
1998							
January	2,093	307	48	19	1,719	82	1,637
February	1,877	291	49	17	1,520	73	1,448
March	2,081	310	51	20	1,700	81	1,619
April	1,994	284	50	20	1,640	78	1,562
May	2,035	266	47	16	1,705	81	1,624
June	1,975	271	49	21	1,634	78	1,556
July	2,002	265	51	20	1,666	80	1,586
August	2,024	273	53	20	1,678	80	1,598
September	1,874	276	51	20	1,527	73	1,454
October	2,026	297	58	21	1,650	79	1,571
November	1,954	292	52	20	1,591	76	1,515
December	1,988	302	51	20	1,615	77	1,538
Total	23,924	3,433	611	234	19,646	938	18,708
1999							
January	^E 2,091	^E 317	^E 58	^E 20	^E 1,696	^E 78	^E 1,618
February	^E 1,882	^E 274	^E 54	^E 18	^E 1,536	^E 71	^E 1,465
March	^E 2,080	^E 307	^E 59	^E 21	^E 1,693	^E 78	^E 1,615
April	^E 1,960	^E 289	^E 42	^E 21	^E 1,608	^E 74	^E 1,534
May	^E 1,998	^E 264	^E 44	^E 21	^E 1,669	^E 77	^E 1,593
June	^E 1,963	^E 279	^E 43	^E 21	^E 1,620	^E 75	^E 1,546
July	^E 1,997	^E 283	^E 44	^E 21	^E 1,649	^E 76	^E 1,573
August	^E 1,975	^E 282	^E 42	^E 20	^E 1,632	^E 75	^E 1,557
September	^E 1,925	^E 262	^E 43	^E 22	^E 1,598	^E 74	^E 1,525
October	^E 2,038	^E 325	^E 45	^E 23	^E 1,644	^E 76	^E 1,569
November	^E 1,978	^E 305	^E 43	^E 22	^E 1,608	^E 74	^E 1,534
December	^E 2,067	^E 341	^E 45	^E 23	^E 1,658	^E 76	^E 1,582
Total	^E23,953	^E3,528	^E561	^E253	^E19,611	^E902	^E18,709
2000							
January	^E 2,041	^E 336	^E 42	^E 20	^E 1,644	^E 76	^E 1,568
February	^E 1,935	^E 320	^E 42	^E 22	^{RE} 1,551	^E 71	^E 1,479
March	^{RE} 2,069	^E 319	^{RE} 46	^{RE} 23	^{RE} 1,680	^E 77	^{RE} 1,602
April	^E 1,933	^E 284	^{RE} 43	^E 20	^{RE} 1,586	^E 73	^{RE} 1,513
May	^{RE} 1,972	^E 265	^E 43	^E 21	^{RE} 1,644	^E 76	^{RE} 1,568
June	^{RE} 1,958	^{RE} 278	^{RE} 45	^{RE} 23	^{RE} 1,613	^{RE} 74	^{RE} 1,538
July	^{RE} 2,011	^{RE} 284	^{RE} 45	^{RE} 22	^E 1,661	^E 76	^E 1,585
August	^E 2,028	^E 282	^E 45	^E 22	^E 1,678	^E 77	^E 1,601
September(STIFS)	NA	NA	NA	NA	^E 1,620	^E 77	^E 1,543
October(STIFS)	NA	NA	NA	NA	^E 1,671	^E 79	^E 1,592
2000 YTD	NA	NA	NA	NA	^E16,347	^E757	^E15,590
1999 YTD	^E19,908	^E2,882	^E473	^E208	^E16,345	^E752	^E15,593
1998 YTD	19,982	2,840	507	195	16,440	785	15,655

^a See Appendix A, Explanatory Note 1, for a discussion of data on Nonhydrocarbon Gases Removed.

^b Extraction loss is only collected on an annual basis. Annually it is between 4 and 5 percent of marketed production. Monthly extraction loss is estimated from monthly marketed production by assuming that the preceding annual percentage remains constant for the next twelve months.

^c Equal to marketed production (wet) minus extraction loss.

^E Estimated Data.

^{RE} Revised Estimated Data.

^{NA} Not Available.

Notes: Data for 1994 through 1998 are final. All other data are preliminary

unless otherwise indicated and contain estimates for selected States (see Table 7). Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components because of independent rounding.

Sources: 1994-1998: Energy Information Administration (EIA), *Natural Gas Annual 1998*. January 1999 through current month: Form EIA-895, "Monthly Quantity of Natural Gas Report," STIFS, and EIA estimates. See Appendix A, Explanatory Notes 1, 3, and 6, for discussion of computation and estimation procedures and revision policies.

Table 2. Supply and Disposition of Dry Natural Gas in the United States, 1994-2000
(Billion Cubic Feet)

Year and Month	Dry Gas Production	Supplemental Gaseous Fuels ^a	Net Imports	Net Storage Withdrawals ^b	Balancing Item ^c	Consumption ^d
1994 Total	18,821	111	2,462	-286	-400	20,708
1995 Total	18,599	110	2,687	415	-230	21,581
1996 Total	18,854	109	2,784	2	217	21,967
1997 Total	18,902	103	2,837	24	92	21,959
1998						
January	1,637	11	270	486	-2	2,401
February	1,448	9	240	301	114	2,111
March	1,619	10	244	255	-4	2,123
April	1,562	8	240	-206	102	1,705
May	1,624	7	242	-402	29	1,500
June	1,556	6	230	-336	6	1,462
July	1,586	8	255	-326	49	1,572
August	1,598	8	264	-286	-1	1,583
September	1,454	7	250	-231	-10	1,471
October	1,571	8	253	-269	-81	1,482
November	1,515	10	246	32	-85	1,717
December	1,538	11	259	452	-131	2,129
Total	18,708	102	2,993	-530	-11	21,262
1999						
January	^E 1,618	^E 10	298	623	^R -26	^R 2,523
February	^E 1,465	^E 8	273	333	^R 46	^R 2,126
March	^E 1,615	^E 9	286	297	^R -50	^R 2,156
April	^E 1,534	^E 8	258	-91	^R 66	^R 1,776
May	^E 1,593	^E 8	277	-337	^R -15	^R 1,525
June	^E 1,546	^E 6	268	-306	^R -94	^R 1,420
July	^E 1,573	^E 7	283	-225	^R -122	^R 1,516
August	^E 1,557	^E 8	299	-238	^R -54	^R 1,570
September	^E 1,525	^E 7	290	-310	^R -52	^R 1,459
October	^E 1,569	^E 8	294	-148	^R -152	^R 1,571
November	^E 1,534	^E 8	287	30	^R -132	^R 1,727
December	^E 1,582	^E 9	308	514	^R -223	^R 2,191
Total	^E18,709	^E96	3,422	141	^R-809	^R21,559
2000						
January	^E 1,568	^E 10	307	780	^R -155	^R 2,511
February	^E 1,479	^E 9	279	454	^R 119	^R 2,340
March	^{RE} 1,602	^E 8	287	162	^R -3	^R 2,056
April	^{RE} 1,513	^E 7	277	-36	^R 27	^R 1,788
May	^{RE} 1,568	^E 7	268	-232	^R 47	^R 1,658
June	^{RE} 1,538	^E 6	279	-272	^R -18	^R 1,534
July	^E 1,585	^E 8	^R 300	-290	^R -40	^R 1,563
August	^E 1,601	^E 8	^E 281	-193	-111	^E 1,585
September(STIFS)	^E 1,543	^E 8	^E 290	^E -310	^E -54	^E 1,478
October(STIFS)	^E 1,592	^E 10	^E 284	^E -257	^E -59	^E 1,570
2000 YTD	^E15,590	^E81	^E2,852	^E-195	^E-247	^E18,081
1999 YTD	^E15,593	^E78	2,828	-403	-454	17,641
1998 YTD	15,655	81	2,488	-1,014	200	17,410

^a Supplemental gaseous fuels data are only collected on an annual basis except for the Dakota Gasification Inc. coal gasification facility which provides data each month. The ratio of annual supplemental fuels (excluding Dakota Gasification Inc.) to the sum of dry gas production, net imports, and net withdrawals from storage is calculated. This ratio, which varies between .0022 and .0037, is applied to the monthly sum of these three elements. The Dakota Gasification Inc. monthly value is added to the result to produce the monthly supplemental fuels estimate.

^b Monthly and annual data for 1994 through 1998 include underground storage and liquefied natural gas storage. Data for January 1999 forward include underground storage only. See Appendix A, Explanatory Note 7 for discussion of computation procedures.

^c Represents quantities lost and imbalances in data due to differences among data sources. See Appendix A, Explanatory Note 9, for full discussion.

^d Consists of pipeline fuel use, lease and plant fuel use, vehicle fuel, and

deliveries to consuming sectors as shown in Table 3.

^R Revised Data.

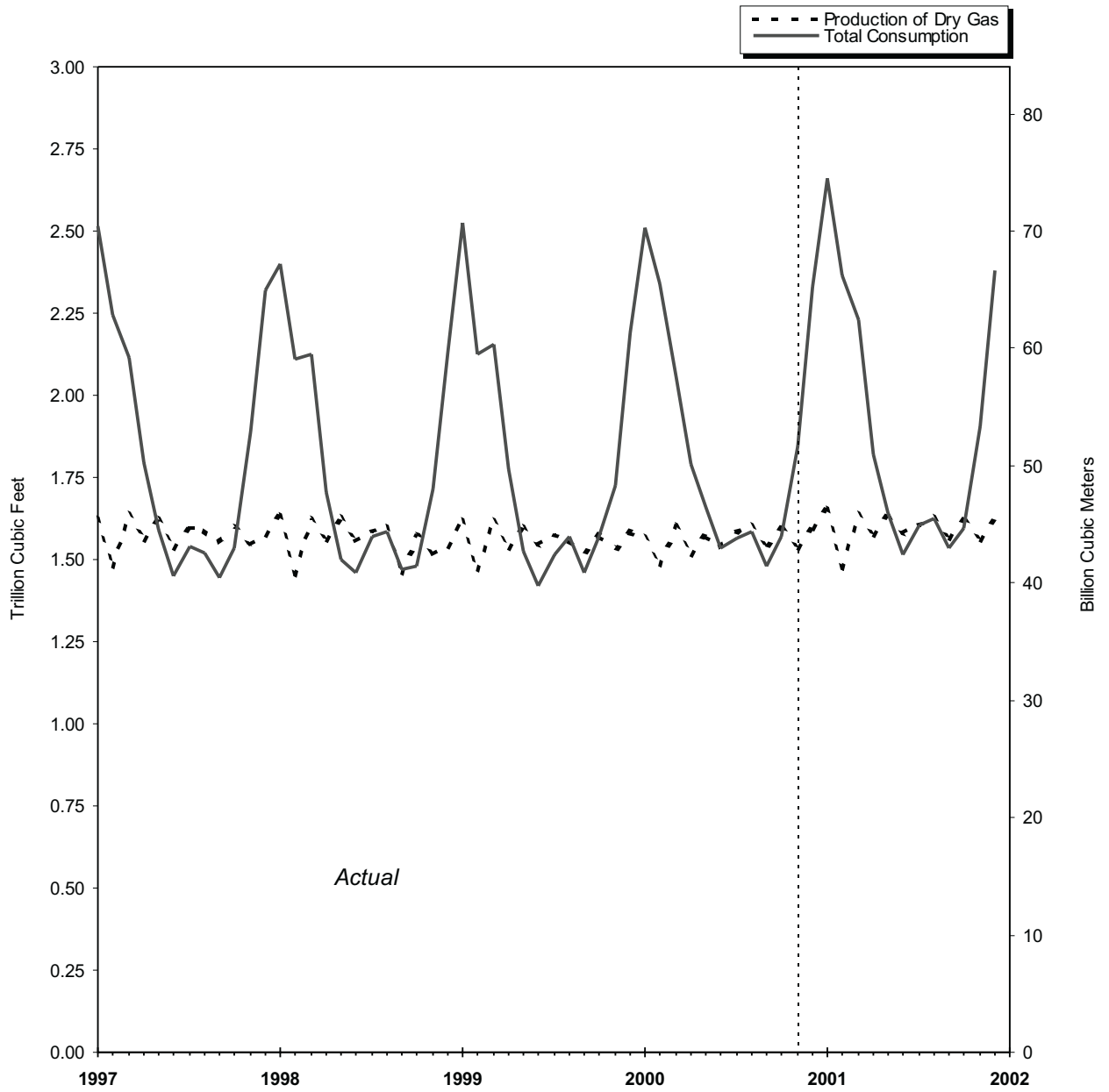
^E Estimated Data.

^{RE} Revised Estimated Data.

Notes: Data for 1994 through 1998 are final. All other data are preliminary unless otherwise indicated. Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components because of independent rounding.

Sources: 1994-1998: Energy Information Administration (EIA), *Natural Gas Annual 1998*. January 1999 through current month: EIA, Form EIA-895, Form EIA-857, Form EIA-191, EIA computations, and estimates, Short-Term Integrated Forecasting System (STIFS) computations, and Office of Fossil Energy, Natural Gas Imports and Exports. See Appendix A for discussion of computation and estimation procedures and revision policies.

Figure 1



Sources: 1997 through the current month: Table 2. Projected data: Energy Information Administration, *Short-Term Energy Outlook*.

Table 3. Natural Gas Consumption in the United States, 1994-2000
(Billion Cubic Feet)

Year and Month	Lease and Plant Fuel ^a	Pipeline Fuel ^b	Delivered to Consumers					Total Consumption
			Residential	Commercial ^c	Industrial	Electric Utilities	Total	
1994 Total	1,124	685	4,848	2,897	8,167	2,987	18,899	20,708
1995 Total	1,220	700	4,850	3,034	8,580	3,197	19,660	21,581
1996 Total	1,250	711	5,241	3,161	8,870	2,732	20,006	21,967
1997 Total	1,203	751	4,984	3,219	8,832	2,968	20,004	21,959
1998								
January	101	73	812	451	793	171	2,227	2,401
February	90	64	692	393	739	134	1,957	2,111
March	101	64	648	367	750	194	1,959	2,123
April	97	51	408	256	704	190	1,558	1,705
May	99	44	221	170	676	290	1,357	1,500
June	96	43	153	138	654	379	1,323	1,462
July	97	47	132	142	704	449	1,428	1,572
August	98	47	117	144	719	457	1,438	1,583
September	90	44	121	140	695	381	1,337	1,471
October	98	44	203	173	718	246	1,340	1,482
November	94	51	398	264	732	178	1,572	1,717
December	96	64	616	362	803	189	1,969	2,129
Total	1,157	635	4,520	3,005	8,686	3,258	19,469	21,262
1999								
January	^E 106	^R 75	^R 904	^R 490	^R 771	176	^R 2,341	^R 2,523
February	^E 96	^R 64	^R 685	^R 403	^R 729	149	^R 1,966	^R 2,126
March	^E 106	64	^R 665	^R 390	^R 726	204	^R 1,985	^R 2,156
April	^E 101	53	^R 420	^R 265	^R 682	254	^R 1,622	^R 1,776
May	^E 105	^R 46	^R 235	^R 182	^R 688	270	^R 1,375	^R 1,525
June	^E 101	^R 42	154	^R 143	^R 658	322	^R 1,276	^R 1,420
July	^E 103	45	^R 128	^R 138	^R 668	434	^R 1,368	^R 1,516
August	^E 102	^R 47	117	^R 140	^R 732	432	^R 1,421	^R 1,570
September	^E 100	^R 44	137	^R 140	^R 755	283	^R 1,315	^R 1,459
October	^E 103	47	^R 234	188	^R 759	240	^R 1,421	^R 1,571
November	^E 101	^R 52	^R 374	^R 258	^R 771	172	^R 1,575	^R 1,727
December	^E 104	^R 65	^R 663	^R 360	^R 822	176	^R 2,021	^R 2,191
Total	^E 1,228	^R 644	^R 4,715	^R 3,098	^R 8,760	3,113	^R 19,687	^R 21,559
2000								
January	^E 103	75	^R 892	^R 469	^R 782	190	^R 2,333	^R 2,511
February	^E 97	^R 70	^R 777	^R 438	^R 792	166	^R 2,173	^R 2,340
March	^E 105	61	^R 551	^R 370	^R 761	207	^R 1,890	^R 2,056
April	^E 99	53	^R 395	^R 266	^R 760	214	^R 1,635	^R 1,788
May	^E 103	^R 50	^R 226	^R 206	^R 765	309	^R 1,505	^R 1,658
June	^{RE} 101	46	^R 153	^R 169	^R 759	306	^R 1,387	^R 1,534
July	^E 104	46	132	165	743	372	1,412	^R 1,563
August(STIFS)	^E 103	^E 41	^E 115	^E 141	^E 802	NA	^E 1,441	^E 1,585
September(STIFS)	^E 101	^E 41	^E 132	^E 141	^E 760	NA	^E 1,336	^E 1,478
October(STIFS)	^E 103	^E 44	^E 225	^E 165	^E 807	NA	^E 1,422	^E 1,570
2000 YTD^d	1,019	527	3,598	2,530	7,731	1,765	16,535	18,081
1999 YTD^d	1,023	527	3,678	2,480	7,167	1,810	16,091	17,641
1998 YTD^d	967	520	3,506	2,373	7,151	1,808	15,923	17,410

^a Plant fuel data are only collected on an annual basis and monthly lease fuel data are only collected annually. Lease and plant fuel estimates have been between 6 and 7 percent of marketed production annually. Monthly lease and plant fuel use is estimated from monthly marketed production by assuming that the preceding annual percentage remains constant for the next twelve months.

^b Pipeline fuel use is only collected on an annual basis. Annually it is between 3 and 4 percent of total consumption. Monthly pipeline fuel data are estimated from monthly total consumption(excluding pipeline fuel) by assuming that the preceding annual percentage remains constant for the next twelve months.

^c Deliveries to Commercial consumers for 1994-1998 include vehicle fuel deliveries, which totaled, in billion cubic feet, 1.7 in 1994, 2.7 in 1995, 2.9 in 1996, 4.4 in 1997, and 5.1 in 1998.

^d Year-to-date volume represents months for which volume information is available in the current year.

^R Revised Data.

^E Estimated Data.

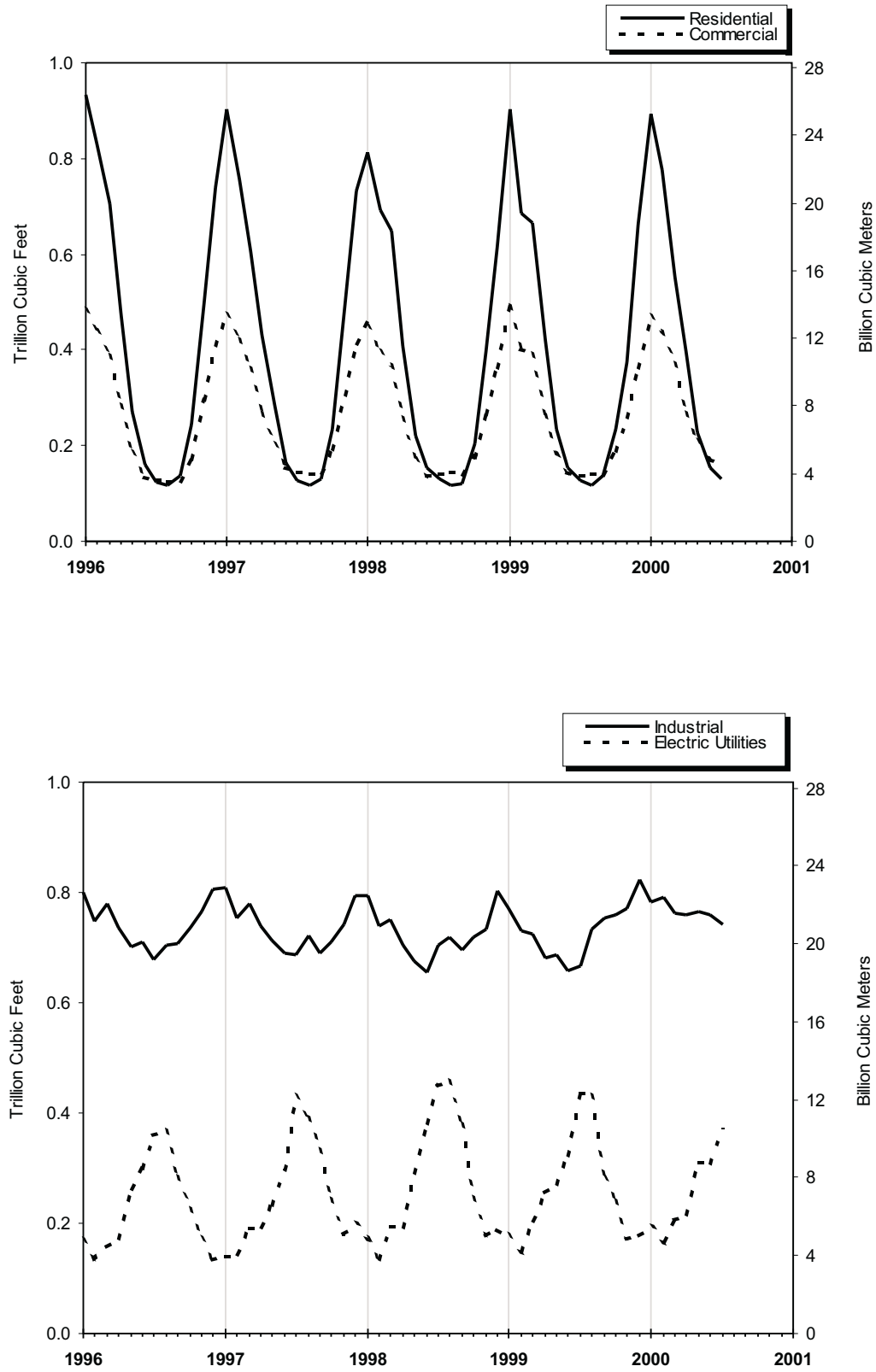
^{RE} Revised Estimated Data.

NA Not Available.

Notes: Data for 1994 through 1998 are final. All other data are preliminary unless otherwise indicated. Estimates for the most recent three months are derived from the Short-Term Integrated Forecasting System (STIFS). Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components because of independent rounding. In 1996, consumption of natural gas for agricultural use was classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

Sources: 1994-1998: Energy Information Administration (EIA): Form EIA-627, "Annual Quantity and Value of Natural Gas Report," (thru 1994), Form EIA-895 "Monthly Quantity of Natural Gas Report," (1995 forward), Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," Form EIA-759, "Monthly Power Plant Report," EIA computations, and *Natural Gas Annual 1998*. January 1999 through the current month: EIA: Form EIA-895, Form EIA-857, Form EIA-759, and STIFS computations. See Appendix A, Explanatory Note 5, for computation procedures and revision policy.

Figure 2. Natural Gas Deliveries to Consumers in the United States, 1996-2000



Source: Table 3.

Table 4. Selected National Average Natural Gas Prices, 1994-2000

(Dollars per Thousand Cubic Feet)

Year and Month	Wellhead Price ^a	City Gate Price	Delivered to Consumers					
			Residential Price	Commercial		Industrial		Electric Utilities Price
				Price	% of Total ^b	Price	% of Total ^b	
1994 Annual Average	1.85	3.07	6.41	5.44	79.3	3.05	25.5	2.28
1995 Annual Average	1.55	2.78	6.06	5.05	76.7	2.71	24.5	2.02
1996 Annual Average	2.17	3.34	6.34	5.40	77.6	3.42	19.4	2.69
1997 Annual Average	2.32	3.66	6.94	5.80	70.8	3.59	18.1	2.78
1998								
January	1.95	3.08	6.41	5.65	73.2	3.67	16.8	2.64
February	1.95	3.08	6.41	5.59	72.9	3.58	16.7	2.51
March	2.05	3.06	6.29	5.40	73.6	3.40	17.3	2.53
April	2.15	3.23	6.81	5.64	67.7	3.28	15.8	2.59
May	2.04	3.12	7.70	5.73	62.6	3.14	14.9	2.47
June	1.90	2.98	8.51	5.51	62.9	2.97	15.1	2.40
July	2.08	3.31	8.53	5.64	56.0	3.04	13.1	2.50
August	1.81	3.01	9.25	5.46	53.3	2.75	13.8	2.21
September	1.69	2.78	8.96	5.49	57.0	2.65	14.2	2.15
October	1.85	2.99	7.60	5.31	59.2	2.75	14.8	2.22
November	1.93	2.99	6.58	5.22	64.5	2.95	15.7	2.37
December	1.94	3.10	6.34	5.23	68.3	2.92	17.2	2.22
Annual Average	1.94	3.07	6.82	5.48	67.0	3.14	16.1	2.40
1999								
January	^E 1.80	^R 2.84	^R 5.94	^R 5.11	^R 71.3	^R 3.32	^R 15.7	2.32
February	^E 1.73	^R 2.93	^R 6.19	^R 5.23	^R 67.4	^R 2.98	^R 15.3	2.26
March	^E 1.70	2.68	^R 5.96	^R 5.04	^R 66.8	^R 3.03	^R 15.8	2.15
April	^E 1.93	^R 2.90	^R 6.28	^R 5.74	^R 63.5	^R 2.82	^R 15.8	2.29
May	^E 2.10	^R 3.43	^R 7.07	^R 5.19	^R 59.9	^R 2.68	^R 16.7	2.57
June	^E 2.09	3.21	^R 7.90	^R 5.30	^R 59.2	^R 2.97	^R 15.6	2.53
July	^E 2.07	^R 3.25	^R 8.53	^R 5.29	^R 57.3	^R 3.00	^R 15.9	2.58
August	^E 2.34	^R 3.60	^R 8.95	^R 5.42	^R 54.3	^R 3.05	^R 19.3	2.86
September	^E 2.42	^R 3.71	^R 8.43	^R 5.49	^R 58.7	^R 3.28	^R 17.9	2.98
October	^E 2.31	^R 3.43	^R 7.48	^R 5.43	^R 59.5	^R 3.32	^R 17.7	2.83
November	^E 2.44	^R 3.77	^R 7.04	^R 5.53	^R 62.1	^R 3.59	^R 17.5	3.01
December	^E 2.03	^R 3.19	^R 6.42	^R 5.55	^R 65.0	^R 3.25	^R 21.2	2.68
Annual Average	^E2.08	^R3.15	^R6.58	^R5.32	^R64.1	^R3.13	^R17.1	2.62
2000								
January	^E 2.12	^R 3.33	^R 6.24	^R 5.47	^R 66.9	^R 3.49	^R 17.2	2.74
February	^E 2.30	^R 3.50	^R 6.39	^R 5.60	^R 68.2	^R 3.67	^R 16.6	2.95
March	^E 2.36	^R 3.57	^R 6.77	^R 5.30	^R 64.2	^R 3.54	^R 15.8	2.99
April	^E 2.55	^R 3.72	^R 7.00	^R 5.59	^R 64.4	^R 3.65	15.5	3.22
May	^{RE} 2.90	^R 4.00	^R 7.87	^R 5.26	^R 64.3	^R 3.76	14.7	3.61
June	^{RE} 3.73	^R 5.21	^R 9.02	^R 5.70	^R 62.2	^R 4.32	15.5	4.46
July	^{RE} 3.70	5.13	9.78	5.67	60.2	4.46	15.7	NA
August	^{RE} 3.67	NA	NA	NA	NA	NA	NA	NA
September	^E 4.26	NA	NA	NA	NA	NA	NA	NA
2000 YTD^c	^E3.07	3.82	6.88	5.49	65.2	3.83	15.8	3.45
1999 YTD^c	^E2.02	2.95	6.33	5.23	65.8	2.98	15.8	2.38
1998 YTD^c	1.96	3.11	6.73	5.58	69.5	3.33	15.7	2.50

^a See Appendix A, Explanatory Note 8, for discussion of wellhead prices.

^b Percentage of total deliveries represented by onsystem sales, see Figure 6. See Table 25 for breakdown by State.

^c Year-to-date price represents months for which price information is available in the current year.

^R Revised Data.

^E Estimated Data.

^{RE} Revised Estimated Data.

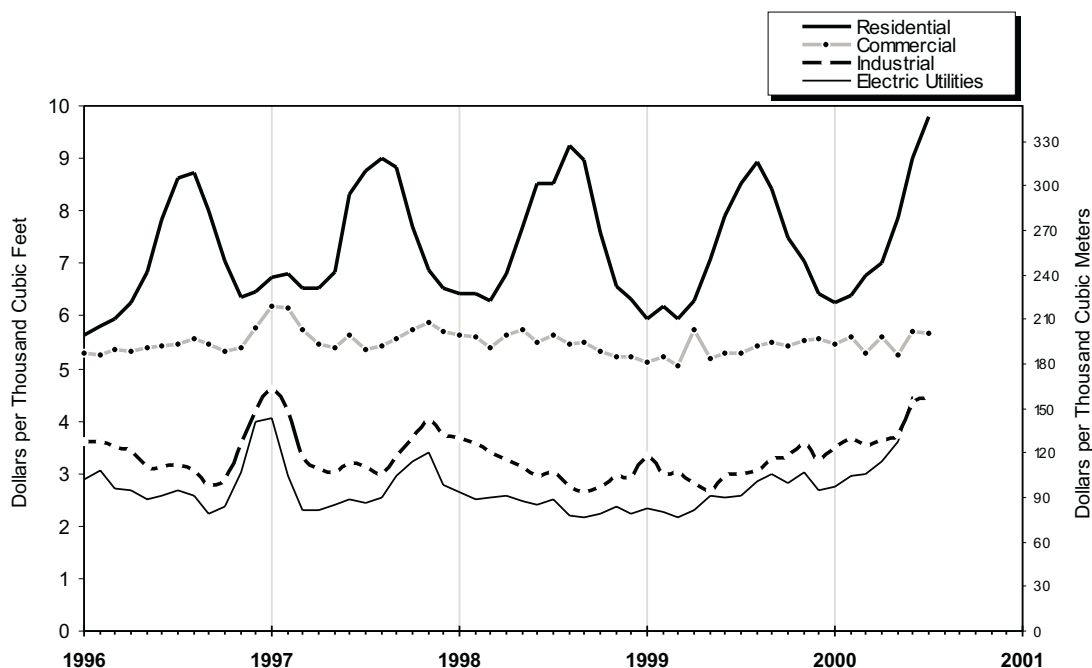
^{NA} Not Available.

Notes: Data for 1994 through 1998 are final. All other data are

preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. In 1996, consumption of natural gas for agricultural use was classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

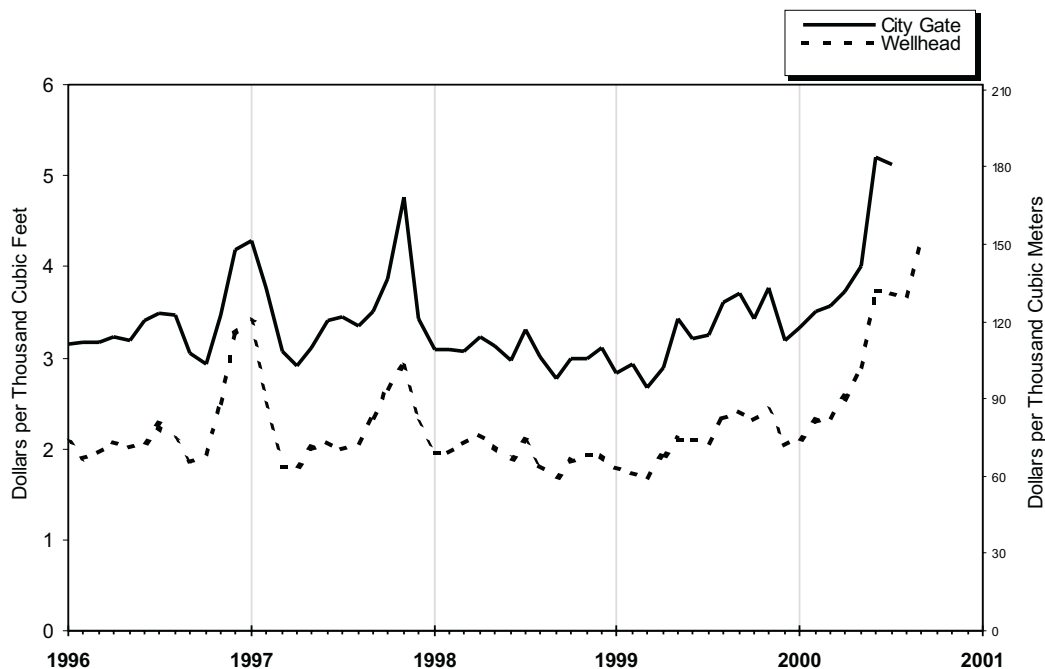
Sources: 1994-1998: Energy Information Administration (EIA) *Natural Gas Annual 1998*. January 1999 through current month: EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," and EIA estimates. See Appendix A, Explanatory Note 8 for estimation procedures and revision policy.

Figure 3. Average Price of Natural Gas Delivered to Consumers in the U.S., 1996-2000



Source: Table 4

Figure 4. Average Price of Natural Gas in the United States, 1996-2000



Source: Table 4

Table 5. U.S. Natural Gas Imports, by Country, 1994-2000

(Volumes in Million Cubic Feet, Prices in Dollars per Thousand Cubic Feet)

Year and Month	Pipeline				LNG					
	Canada		Mexico		Algeria		Australia		Nigeria	
	Volume	Average Price	Volume	Average Price	Volume	Average Price	Volume	Average Price	Volume	Average Price
1994 Total	2,566,049	1.86	7,013	1.99	50,778	2.28	0	—	0	—
1995 Total	2,816,408	1.48	6,722	1.53	17,918	2.30	0	—	0	—
1996 Total	2,883,277	1.96	13,862	2.25	35,325	2.70	0	—	0	—
1997 Total	2,899,152	2.15	17,243	2.31	65,675	2.67	9,686	2.92	0	—
1998										
January	276,118	2.06	55	2.12	10,105	2.51	0	—	0	—
February	239,091	1.90	2,184	2.04	7,606	2.51	2,171	3.99	0	—
March	257,485	1.97	380	2.20	5,166	2.50	0	—	0	—
April	247,363	2.03	3,249	2.37	2,549	2.52	0	—	0	—
May	243,868	2.00	845	2.15	7,596	2.51	0	—	0	—
June	235,847	1.86	5	2.21	5,149	2.51	2,441	2.91	0	—
July	259,412	1.96	1,821	2.13	5,086	2.52	0	—	0	—
August	268,535	1.80	1,413	1.78	2,540	2.52	2,321	2.92	0	—
September	254,752	1.66	2,257	1.86	5,133	2.52	0	—	0	—
October	260,135	1.92	905	1.65	5,023	2.50	0	—	0	—
November	247,971	2.09	0	—	5,042	2.51	2,353	3.55	0	—
December	261,495	2.14	1,418	1.77	7,572	2.51	2,348	3.18	0	—
Total	3,052,073	1.95	14,532	2.03	68,567	2.51	11,634	3.30	0	—
1999										
January	292,833	2.02	4,891	1.74	13,066	2.42	0	—	0	—
February	269,126	1.90	4,398	1.69	7,684	2.51	2,557	3.55	0	—
March	287,769	1.77	751	1.60	13,090	2.44	0	—	0	—
April	257,065	1.83	4,193	2.02	7,637	2.35	0	—	0	—
May	275,219	2.18	6,844	1.94	3,898	2.13	0	—	0	—
June	260,240	2.13	4,978	2.12	2,528	2.17	2,314	2.33	0	—
July	278,424	2.17	3,877	2.21	5,134	2.18	0	—	0	—
August	288,717	2.39	6,028	2.61	2,554	2.17	2,302	2.37	0	—
September	280,798	2.64	4,643	2.39	7,593	2.49	0	—	0	—
October	287,177	2.50	4,168	2.49	5,118	2.48	2,309	2.42	0	—
November	284,514	2.85	6,463	2.31	2,440	2.85	0	—	0	—
December	305,663	2.32	3,296	2.08	5,021	2.51	2,422	2.76	0	—
Total	3,367,545	2.23	54,530	2.14	75,763	2.41	11,904	2.70	0	—
2000										
January	310,181	2.43	2,911	2.30	5,026	2.51	0	—	0	—
February	289,222	2.57	730	2.50	4,987	3.62	0	—	0	—
March	292,023	2.61	316	2.60	3,990	2.40	0	—	0	—
April	274,151	2.85	756	2.97	2,566	2.62	2,274	3.18	0	—
May	274,895	3.06	0	—	2,453	3.01	0	—	0	—
June	278,799	3.89	0	—	2,529	3.40	0	—	2,488	4.20
July	^R 294,508	NA	0	—	5,069	NA	2,285	NA	2,496	NA
August	^E 283,216	NA	0	—	2,370	NA	0	—	0	—
2000 YTD	^E2,296,996	NA	4,713	2.46	28,990	NA	4,559	NA	4,983	NA
1999 YTD	2,209,393	2.05	35,960	2.05	55,591	2.36	7,173	2.78	0	—
1998 YTD	2,027,720	1.95	9,952	2.14	45,799	2.51	6,933	3.25	0	—

See footnotes at end of table.

Table 5. U.S. Natural Gas Imports, by Country, 1994-2000

(Volumes in Million Cubic Feet, Prices in Dollars per Thousand Cubic Feet) — Continued

Year and Month	LNG								Total	
	Qatar		Trinidad		United Arab Emirates		Other		Volume	Average Price
	Volume	Average Price	Volume	Average Price	Volume	Average Price	Volume	Average Price		
1994 Total	0	—	0	—	0	—	0	—	2,623,839	1.87
1995 Total	0	—	0	—	0	—	0	—	2,841,048	1.49
1996 Total	0	—	0	—	4,949	3.46	0	—	2,937,413	1.97
1997 Total	0	—	0	—	2,417	3.74	0	—	2,994,173	2.17
1998										
January	0	—	0	—	0	—	0	—	286,278	2.08
February	0	—	0	—	0	—	0	—	251,052	1.94
March	0	—	0	—	0	—	0	—	263,032	1.98
April	0	—	0	—	0	—	0	—	253,161	2.04
May	0	—	0	—	0	—	0	—	252,310	2.02
June	0	—	0	—	0	—	0	—	243,442	1.88
July	0	—	0	—	0	—	0	—	266,319	1.97
August	0	—	0	—	0	—	0	—	274,809	1.82
September	0	—	0	—	0	—	0	—	262,142	1.68
October	0	—	0	—	0	—	0	—	266,063	1.93
November	0	—	0	—	2,667	2.78	0	—	258,033	2.12
December	0	—	0	—	2,585	2.47	0	—	275,417	2.16
Total	0	—	0	—	5,252	2.63	0	—	3,152,058	1.97
1999										
January	0	—	0	—	0	—	0	—	310,790	2.03
February	2,647	2.72	0	—	0	—	0	—	286,412	1.93
March	0	—	0	—	0	—	0	—	301,610	1.80
April	2,492	1.91	0	—	0	—	0	—	271,387	1.85
May	0	—	5,493	1.88	0	—	0	—	291,454	2.17
June	2,417	1.94	6,619	2.08	0	—	0	—	279,096	2.13
July	2,388	2.61	6,599	2.11	0	—	0	—	296,422	2.18
August	0	—	9,904	2.33	0	—	^a 2,576	2.36	312,081	2.39
September	4,987	2.74	4,393	2.55	0	—	0	—	302,414	2.63
October	0	—	5,865	2.57	0	—	0	—	304,637	2.50
November	2,374	3.45	6,648	2.85	2,713	3.03	0	—	305,152	2.85
December	2,392	3.59	5,256	2.83	0	—	0	—	324,050	2.34
Total	19,697	2.71	50,777	2.39	2,713	3.03	—	2.36	3,585,505	2.24
2000										
January	0	—	7,780	3.01	0	—	0	—	325,898	2.44
February	0	—	5,168	2.90	0	—	0	—	300,107	2.59
March	2,428	2.79	8,393	2.89	0	—	0	—	307,150	2.62
April	7,254	2.71	7,285	3.04	0	—	0	—	294,286	2.85
May	0	—	10,723	3.05	0	—	0	—	288,072	3.06
June	2,385	2.75	7,390	3.47	2,725	3.56	0	—	296,316	3.87
July	4,531	NA	^R 9,951	NA	0	—	0	—	^R 318,839	NA
August	7,167	NA	6,630	NA	0	—	0	—	^E 299,382	NA
2000 YTD	23,764	NA	63,320	NA	2,725	3.56	0	—	^E 2,430,050	NA
1999 YTD	9,944	2.30	28,615	2.14	0	—	2,576	2.36	2,349,252	2.06
1998 YTD	0	—	0	—	0	—	0	—	2,090,403	1.97

^a Received from Malaysia.^R Revised Data.^E Estimated Data.

NA Not Available.

— Not Applicable.

— Data not available.

Sources: 1994: Energy Information Administration, Form FPC-14,

"Annual Report for Importers and Exporters of Natural Gas." January 1995 through the current month (except estimates): Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*. Estimated pipeline data (shown with an "E") are taken from data from the National Energy Board of Canada plus EIA estimates. LNG data: Industry reports.

Table 6. U.S. Natural Gas Exports, by Country, 1994-2000

(Volumes in Million Cubic Feet, Prices in Dollars per Thousand Cubic Feet)

Year and Month	Pipeline				LNG				Total	
	Canada		Mexico		Japan		Mexico		Volume	Average Price
	Volume	Average Price	Volume	Average Price	Volume	Average Price	Volume	Average Price		
1994 Total	52,556	2.42	46,500	1.68	62,682	3.18	0	—	161,738	2.50
1995 Total	27,554	1.96	61,283	1.50	65,283	3.41	0	—	154,119	2.39
1996 Total	51,905	2.67	33,840	2.11	67,648	3.65	0	—	153,393	2.97
1997 Total	56,447	2.52	38,372	2.46	62,187	3.83	0	—	157,006	3.02
1998										
January	4,930	2.53	4,257	2.11	7,446	3.67	0	—	16,632	2.93
February	4,502	2.11	3,117	2.06	3,726	3.42	0	—	11,346	2.53
March	7,851	2.25	4,202	2.14	7,435	3.09	0	—	19,488	2.55
April	4,509	2.47	2,675	2.23	5,702	2.81	0	—	12,886	2.57
May	2,083	2.28	6,119	2.12	1,891	2.70	0	—	10,093	2.26
June	1,938	2.03	5,617	1.98	5,695	2.69	0	—	13,250	2.29
July	1,634	1.97	3,852	2.20	5,679	2.70	0	—	11,166	2.42
August	52	1.87	4,834	1.95	5,676	2.70	1	5.88	10,563	2.35
September	1,481	2.09	2,892	1.81	7,584	2.68	0	—	11,957	2.40
October	2,127	2.03	5,167	1.90	5,679	2.72	3	5.74	12,975	2.28
November	3,630	2.17	5,079	2.00	3,776	2.75	9	5.69	12,494	2.28
December	5,152	2.26	5,323	1.99	5,662	2.73	20	5.68	16,157	2.34
Total	39,891	2.25	53,133	2.04	65,951	2.91	33	5.69	159,007	2.45
1999										
January	2,264	1.92	4,526	1.81	5,586	2.95	24	7.41	12,400	2.36
February	2,564	1.93	4,777	1.72	5,564	2.94	29	7.39	12,934	2.30
March	4,494	1.80	5,950	1.62	5,570	2.88	21	7.33	16,035	2.11
April	2,246	1.80	5,049	1.87	5,687	2.77	19	7.13	13,001	2.26
May	2,212	2.26	6,108	2.27	5,644	2.78	24	7.42	13,988	2.48
June	1,953	2.14	5,278	2.29	3,754	2.77	18	7.28	11,003	2.44
July	1,987	2.19	5,612	2.31	5,675	2.88	20	7.14	13,294	2.54
August	2,018	2.41	5,398	2.70	5,643	3.11	20	7.36	13,079	2.84
September	1,959	2.80	5,267	2.89	5,605	3.23	21	7.26	12,852	3.03
October	2,339	2.63	4,086	2.68	3,723	3.28	13	7.07	10,161	2.89
November	8,018	2.95	5,001	2.89	5,579	3.56	30	5.85	18,628	3.12
December	6,454	2.39	3,973	2.28	5,577	3.81	36	5.82	16,040	2.86
Total	38,508	2.35	61,025	2.27	63,607	3.08	275	6.95	163,415	2.61
2000										
January	7,056	2.49	5,937	2.39	5,569	4.04	36	5.82	18,598	2.93
February	9,033	2.70	6,394	2.62	5,566	4.08	37	5.82	21,030	3.05
March	9,051	2.74	7,641	2.70	3,769	4.18	45	5.82	20,506	3.00
April	3,093	2.86	8,794	2.93	5,670	4.25	30	5.82	17,587	3.35
May	3,791	3.15	10,338	3.23	5,709	4.27	31	5.82	19,869	3.52
June	4,331	4.19	8,714	4.30	3,763	4.34	30	5.82	16,837	4.28
July	^E 4,331	NA	^E 8,714	NA	5,587	NA	NA	NA	^E 18,632	NA
August	^E 4,331	NA	^E 8,714	NA	5,596	NA	NA	NA	^E 18,641	NA
2000 YTD	^E 45,016	NA	^E 65,246	NA	41,229	NA	NA	NA	^E 151,701	NA
1999 YTD	19,738	2.02	42,698	2.08	43,123	2.89	175	7.32	105,734	2.41
1998 YTD	27,500	2.28	34,672	2.09	43,250	3.01	1	5.88	105,423	2.52

^E Estimated Data.

NA Not Available.

— Not Applicable.

Sources: 1994: Energy Information Administration, Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." January 1995

through the current month (except estimates): Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*. Estimated pipeline data (shown with an "E") are taken from data from the National Energy Board of Canada plus EIA estimates. LNG data: Industry reports.

Table 7. Marketed Production of Natural Gas, by State, 1994-2000
(Million Cubic Feet)

Year and Month	Alabama ^b	Alaska	Arizona	California	Colorado	Florida	Kansas
1994 Total	515,272	555,402	752	309,427	453,207	7,486	712,730
1995 Total	519,661	469,550	558	279,555	523,084	6,463	721,436
1996 Total	530,841	480,828	463	286,494	572,071	6,006	712,796
1997 Total	583,272	468,311	452	285,690	637,375	6,114	687,215
1998							
January	46,466	43,382	43	24,752	57,511	503	53,032
February	41,653	39,244	42	22,151	52,954	491	48,698
March	46,476	42,479	53	22,708	58,795	592	52,948
April	46,281	38,540	43	21,952	57,586	531	51,415
May	48,978	35,281	38	23,894	57,916	513	54,334
June	49,638	36,217	34	24,871	55,989	426	52,862
July	50,131	36,171	42	27,157	57,737	486	51,324
August	49,215	36,118	36	29,727	58,584	472	54,059
September	42,308	36,884	32	29,114	57,005	498	43,419
October	47,503	39,958	31	30,467	60,868	423	47,058
November	46,682	39,483	33	29,508	59,592	401	47,359
December	48,447	42,890	33	28,974	61,783	459	47,078
Total	563,779	466,648	457	315,277	696,321	5,796	603,586
1999							
January	32,042	43,848	31	29,268	64,539	517	52,200
February	29,023	39,443	27	26,541	65,679	448	43,801
March	31,836	42,685	36	30,361	64,787	494	47,290
April	28,413	^E 37,537	38	29,808	60,311	459	45,904
May	33,517	^E 33,279	41	30,944	62,881	427	46,147
June	32,295	^E 35,853	45	28,553	61,281	392	46,452
July	32,356	^E 36,229	60	30,744	61,014	503	46,254
August	32,180	34,246	51	31,632	61,142	570	45,902
September	32,532	32,790	43	31,288	58,471	526	44,294
October	32,386	39,580	43	32,560	62,315	528	45,342
November	32,204	40,458	35	32,442	60,588	566	44,094
December	32,917	43,918	28	31,804	59,278	503	45,740
Total	381,702	^E 459,865	478	365,945	742,284	5,933	553,419
2000							
January	32,291	43,584	37	31,011	^E 61,130	499	44,772
February	30,245	38,884	33	28,855	^E 58,455	480	42,199
March	31,529	^E 39,274	26	31,351	^E 62,186	567	40,737
April	30,427	^E 34,542	28	30,645	^E 59,718	^E 504	^E 39,555
May	^R 31,134	^E 30,923	31	31,886	^E 60,667	^E 474	43,445
June	^E 30,638	^E 33,059	32	29,799	^E 58,778	^E 405	43,565
2000 YTD	^E 186,263	^E 220,266	187	183,548	^E 360,934	^E 2,929	^E 254,272
1999 YTD	187,127	^E 232,644	218	175,476	379,477	2,736	281,794
1998 YTD	279,492	235,143	252	140,330	340,751	3,057	313,289

See footnotes at end of table.

Table 7. Marketed Production of Natural Gas, by State, 1994-2000

(Million Cubic Feet) — Continued

Year and Month	Louisiana ^b	Michigan	Mississippi	Montana	New Mexico	North Dakota	Oklahoma
1994 Total	5,169,705	222,657	63,448	50,416	1,557,689	57,805	1,934,864
1995 Total	5,108,366	238,203	95,533	50,264	1,625,837	49,468	1,811,734
1996 Total	5,289,742	245,740	103,263	50,996	1,554,087	49,674	1,734,887
1997 Total	5,229,821	305,950	107,300	52,437	1,558,633	52,401	1,703,888
1998							
January	453,867	28,460	9,639	4,831	130,265	4,623	158,897
February	409,480	8,278	8,574	4,569	118,164	4,039	126,200
March	459,364	30,780	9,781	4,892	132,729	4,344	136,334
April	452,863	17,823	8,957	4,683	127,544	4,311	134,115
May	471,279	29,198	9,121	4,978	131,488	4,529	140,400
June	451,104	26,958	8,586	4,448	120,632	4,304	136,013
July	454,637	26,171	9,258	4,636	126,924	4,460	134,510
August	457,279	18,896	8,834	4,594	129,164	4,546	139,914
September	363,707	28,491	8,664	4,750	124,152	4,435	134,805
October	433,764	21,816	8,868	5,040	129,640	4,610	138,167
November	431,629	12,013	8,602	5,044	116,404	4,465	134,583
December	448,896	29,193	9,184	5,182	113,991	4,520	130,592
Total	5,287,870	278,076	108,068	57,645	1,501,098	53,185	1,644,531
1999							
January	466,143	20,853	9,154	^E 4,947	134,745	4,331	^E 144,408
February	425,121	8,746	8,678	^E 4,700	134,071	3,858	^E 122,928
March	463,776	39,892	9,933	^E 5,002	134,084	4,220	^E 133,354
April	450,953	22,653	9,426	^E 4,749	134,098	4,298	^E 131,587
May	474,329	25,273	9,708	^E 4,894	134,008	4,335	^E 139,036
June	464,118	25,120	9,480	^E 4,118	133,918	4,329	^E 133,557
July	468,257	24,043	9,542	^E 4,340	133,828	4,570	^E 132,444
August	468,679	19,291	9,406	^E 4,552	133,738	4,540	^E 133,202
September	444,299	24,696	9,198	^E 4,621	135,075	4,431	^E 132,151
October	447,547	13,774	9,050	^E 4,527	136,426	4,613	^E 137,584
November	444,283	21,770	8,608	^E 5,019	^E 127,203	4,576	^E 131,472
December	457,337	32,091	8,840	^E 5,371	^E 126,935	4,622	^E 132,433
Total	5,474,842	278,202	111,022	^E56,840	^E1,598,128	52,722	^E1,604,156
2000							
January	460,309	22,664	8,241	5,883	119,673	4,596	^E 133,257
February	432,654	16,043	^E 7,636	5,344	120,198	4,114	^E 124,665
March	467,392	33,779	^R 7,350	5,595	^E 129,748	^E 4,288	^E 132,000
April	452,175	12,800	^R 6,785	5,123	^E 126,357	4,270	^E 128,321
May	462,558	26,717	^E 8,366	3,220	^E 128,915	4,530	^E 134,196
June	458,181	^E 17,497	^E 8,241	^E 2,737	^E 121,776	4,316	^E 128,340
2000 YTD	2,733,269	^E129,501	^E46,619	^E27,902	^E746,668	^E26,115	^E780,779
1999 YTD	2,744,440	142,538	56,378	^E28,410	804,923	25,370	^E804,870
1998 YTD	2,697,957	141,497	54,659	28,399	760,822	26,150	831,959

See footnotes at end of table.

Table 7. Marketed Production of Natural Gas, by State, 1994-2000

(Million Cubic Feet) — Continued

Year and Month	Oregon	Texas ^c	Utah	Wyoming	Other ^a States	U.S. Total
1994 Total	3,221	6,353,844	270,858	696,018	774,724	19,709,525
1995 Total	1,923	6,330,048	241,290	673,775	759,728	19,506,474
1996 Total	1,439	6,470,620	250,767	666,036	805,491	19,812,241
1997 Total	1,173	6,453,873	257,139	738,368	736,679	19,866,093
1998						
January	90	550,623	21,826	66,238	64,219	1,719,267
February	79	497,583	21,758	59,825	56,464	1,520,246
March	96	548,845	23,656	64,659	60,395	1,699,925
April	92	531,219	23,513	61,338	57,355	1,640,161
May	92	545,368	24,967	65,642	57,484	1,705,500
June	90	522,691	23,968	59,655	55,586	1,634,073
July	95	536,998	23,036	63,534	58,630	1,665,937
August	94	542,707	23,681	63,228	56,789	1,677,936
September	90	507,526	21,554	63,059	56,609	1,527,103
October	83	529,662	23,830	65,994	61,915	1,649,698
November	85	509,919	23,045	64,618	57,038	1,590,505
December	80	495,612	22,507	63,523	62,259	1,615,203
Total	1,067	6,318,754	277,340	761,313	704,742	19,645,554
1999						
January	83	542,129	23,467	62,582	^E 60,348	^E 1,695,636
February	84	490,865	21,141	55,832	^E 55,142	^E 1,536,128
March	120	534,240	23,878	67,624	^E 59,456	^E 1,693,066
April	111	507,927	22,076	61,885	^E 55,351	^E 1,607,583
May	113	526,518	22,771	64,838	^E 56,407	^E 1,669,465
June	111	501,865	21,828	63,028	^E 53,875	^E 1,620,216
July	110	521,504	21,707	66,127	^E 55,164	^E 1,648,796
August	74	517,063	21,493	58,535	^E 55,466	^E 1,631,761
September	90	503,267	19,725	66,255	^E 54,270	^E 1,598,021
October	124	525,498	21,610	71,680	^E 59,148	^E 1,644,334
November	134	508,064	21,364	67,983	^E 57,000	^E 1,607,863
December	138	521,846	21,554	73,001	^E 60,056	^E 1,658,412
Total	1,291	6,200,786	262,614	779,369	^E681,684	^E19,611,282
2000						
January	120	534,692	^R 21,995	60,415	^E 58,767	^{RE} 1,643,936
February	101	497,914	^R 20,513	69,756	^E 52,594	^{RE} 1,550,683
March	102	540,947	^R 21,897	74,361	^E 56,517	^{RE} 1,679,646
April	95	518,945	^R 21,241	60,883	^E 53,286	^{RE} 1,585,702
May	98	537,490	^R 22,513	^E 62,704	^E 54,179	^{RE} 1,644,048
June	90	529,585	^E 21,191	72,804	^E 51,575	^E 1,612,609
2000 YTD	606	3,159,573	^E129,350	^E400,923	^E326,918	^E9,716,622
1999 YTD	621	3,103,544	135,161	375,788	^E340,579	^E9,822,095
1998 YTD	539	3,196,329	139,688	377,357	351,502	9,919,172

^a Includes Arkansas, Illinois, Indiana, Kentucky, Maryland, Missouri, Nebraska, Nevada, New York, Ohio, Pennsylvania, South Dakota, Tennessee, Virginia and West Virginia. The 1999 monthly values for these States are estimated.

^b For Alabama and Louisiana, all data for 1994 through 1998 include Federal Offshore production. For 1999, Alabama data do not include Federal Offshore production, while data for Louisiana include both the Louisiana and Alabama portions of Federal Offshore Production.

^c Federal offshore production volumes are included.

^R Revised Data.

^E Estimated Data.

^{RE} Revised Estimated Data.

Notes: Data for 1994 through 1998 are final. All other data are preliminary unless otherwise indicated. Totals may not equal sum of components because of independent rounding. See Appendix A, Explanatory Notes 1 and 3 for discussion of computation procedures and revision policy.

Sources: 1994-1998: Energy Information Administration (EIA), *Natural Gas Annual* 1998.1999 through current month: Form EIA-895, "Monthly Quantity of Natural Gas Report," Minerals Management Service reports, and EIA computations.

Table 8. Gross Withdrawals and Marketed Production of Natural Gas by State, June 2000
(Million Cubic Feet)

State	Gross Withdrawals			Repressuring	Nonhydrocarbon Gases Removed ^a	Vented and Flared	Marketed Production
	From Gas Wells	From Oil Wells	Total				
Alabama	£33,378	£532	£33,910	£1,232	£1,931	£109	£30,638
Alaska	£12,913	£236,446	£249,359	£215,831	0	£469	£33,059
Arizona	32	0	32	0	0	0	32
California	7,551	25,933	33,484	3,452	157	76	29,799
Colorado	£51,414	£7,934	£59,348	£507	0	£63	£58,778
Florida	£0	£458	£458	0	£53	0	£405
Kansas	39,598	4,085	43,682	74	0	44	43,565
Louisiana	403,196	60,612	463,808	3,638	0	1,990	458,181
Michigan	14,240	3,560	17,800	£125	0	£178	£17,497
Mississippi	£9,753	£470	£10,224	£582	£1,180	£221	£8,241
Montana	£2,411	£329	£2,740	£3	0	0	£2,737
New Mexico	£116,771	£18,086	£134,857	£820	£12,042	£218	£121,776
North Dakota	1,110	3,480	4,590	0	5	269	4,316
Oklahoma	£115,781	£12,559	£128,340	£0	£0	£0	£128,340
Oregon	109	0	109	4	15	0	90
Texas	469,562	113,620	583,182	37,740	13,403	2,454	529,585
Utah	£19,306	£2,962	£22,268	£44	0	£1,032	£21,191
Wyoming	112,276	5,847	118,123	14,312	15,494	15,514	72,804
Other States	£49,452	£2,731	£52,183	£83	£416	£108	£51,575
Total	£1,458,853	£499,645	£1,958,498	£278,447	£44,696	£22,746	£1,612,609

^a See Appendix A, Explanatory Note 1, for a discussion of data on Nonhydrocarbon Gases Removed.

[£] Estimated Data.

Notes: All monthly data are considered preliminary until publication of the

Natural Gas Annual for that year. Totals may not equal sum of components because of independent rounding. See Appendix A, Explanatory Notes 1 and 3 for discussion of computation procedures and revision policy.

Sources: Form EIA-895, "Monthly Quantity of Natural Gas Report."

Table 9. Underground Natural Gas Storage - All Operators, 1994-2000

(Volumes in Billion Cubic Feet)

Year and Month	Natural Gas in Underground Storage at End of Period			Change In Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total ^b	Volume	Percent	Injections	Withdrawals	Net Withdrawals ^c
1994 Total^a	4,360	2,606	6,966	284	12.2	2,796	2,508	-288
1995 Total^a	4,349	2,153	6,503	-453	-17.4	2,566	2,974	408
1996 Total^a	4,341	2,173	6,513	19	0.9	2,906	2,911	6
1997 Total^a	4,350	2,175	6,525	2	0.1	2,800	2,824	24
1998								
January	4,347	1,712	6,060	215	14.5	69	538	468
February	4,342	1,426	5,768	286	25.2	75	365	291
March	4,342	1,183	5,524	192	19.4	136	382	246
April	4,339	1,386	5,725	334	31.9	280	80	-200
May	4,341	1,774	6,114	407	29.9	433	42	-391
June	4,335	2,114	6,449	381	22.1	379	52	-327
July	4,378	2,428	6,806	409	20.4	371	54	-317
August	4,340	2,698	7,038	358	15.4	336	58	-278
September	4,341	2,928	7,269	253	9.6	298	74	-224
October	4,342	3,191	7,533	302	10.6	308	46	-262
November	4,344	3,155	7,499	453	16.9	137	168	31
December	4,326	2,730	7,056	554	25.5	83	519	436
Total	—	—	—	—	—	2,905	2,379	-526
1999								
January	4,327	2,094	6,421	381	22.2	55	678	623
February	4,312	1,792	6,104	372	26.2	62	395	333
March	4,361	1,430	5,792	246	20.7	84	381	297
April	4,355	1,514	5,869	131	9.5	203	112	-91
May	4,346	1,847	6,192	72	4.0	380	43	-337
June	4,344	2,157	6,501	54	2.6	345	40	-306
July	4,350	2,390	6,740	-27	-1.1	303	78	-225
August	4,342	2,632	6,974	-66	-2.4	309	70	-238
September	4,360	2,884	7,245	-43	-1.5	352	42	-310
October	4,360	3,026	7,386	-165	-5.2	238	90	-148
November	4,364	2,991	7,355	-164	-5.2	170	200	30
December	4,373	2,509	6,881	-221	-8.1	54	568	514
Total	—	—	—	—	—	2,555	2,697	141
2000								
January	4,363	1,725	6,088	-370	-17.6	48	829	780
February	4,371	1,300	5,672	-491	-27.4	78	532	454
March	4,364	1,150	5,514	-280	-19.6	132	294	162
April	4,363	1,184	5,547	-329	-21.8	181	145	-36
May	4,356	1,426	5,782	-420	-22.8	308	75	-232
June	4,355	1,706	6,061	-450	-20.9	339	67	-272
July	4,355	1,996	6,351	-394	-16.5	368	77	-290
August	4,355	2,190	6,544	-442	-16.8	296	102	-193
September(STIFS)	^E 4,355	^{RE} 2,500	^{RE} 6,855	^{RE} -385	^{RE} -13.3	^{NA}	^{NA}	^E -310
October(STIFS)	^E 4,355	^E 2,757	^E 7,112	^E -269	^E -8.9	^{NA}	^{NA}	^E -257

^a Total as of December 31.^b Total underground storage capacity at the end of each calendar year (in billion cubic feet): 1994 - 8,043; 1995 - 7,927; 1996 - 8,159; 1997 - 8,128; and 1998 - 8,179.^c Negative numbers indicate the volume of injections in excess of withdrawals. Positive numbers indicate the volume of withdrawals in excess of injections.^E Estimated Data.^{RE} Revised Estimated Data.^{NA} Not Available.

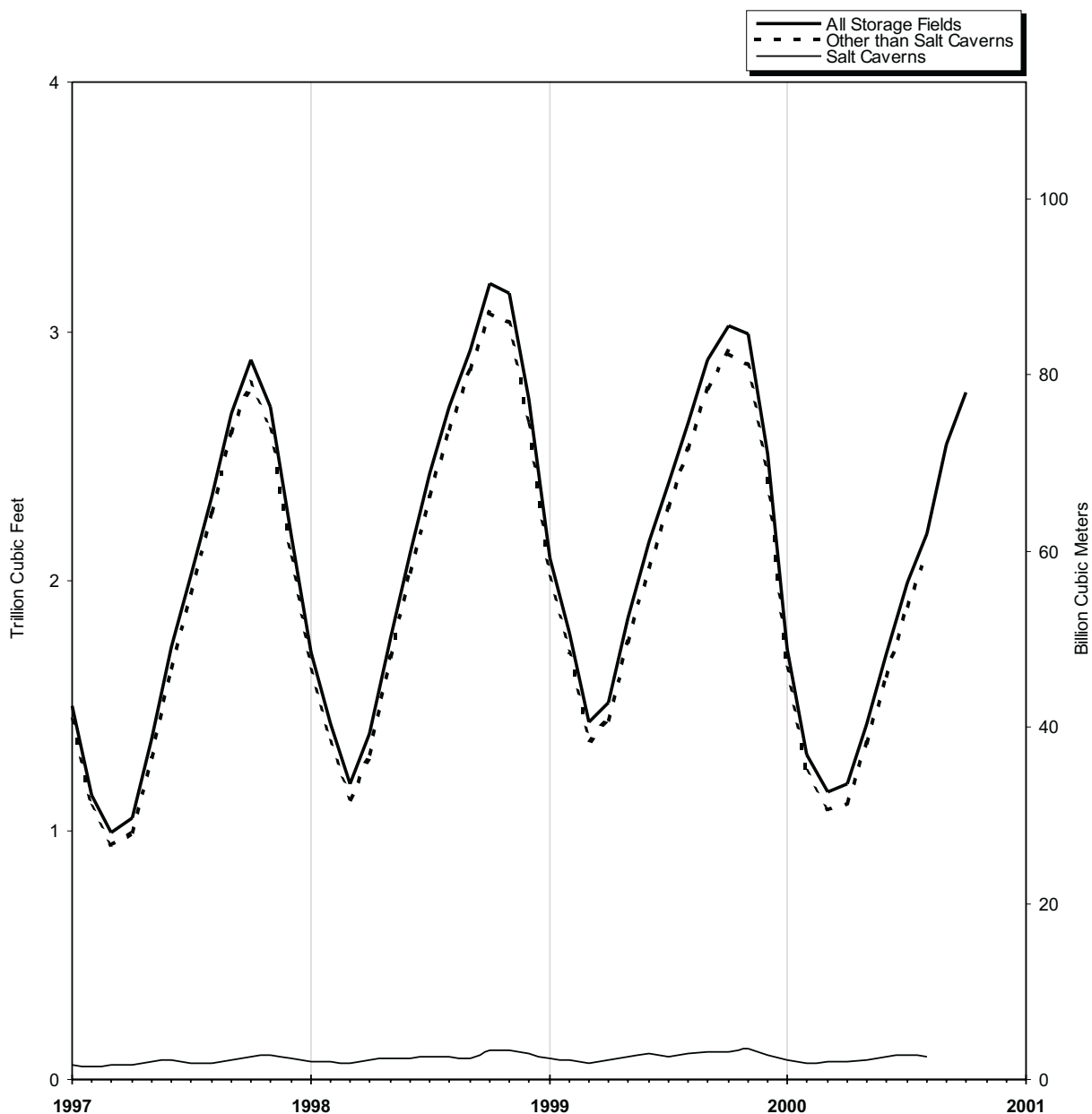
— Not Applicable.

Notes: Data for 1994 through 1998 are final. All other data are

preliminary unless otherwise noted. Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). See Explanatory Note 7 for discussion of revision policy. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia.

Sources: Form EIA-191, "Monthly Underground Gas Storage Report," Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and STIFS.

Figure 5. Working Gas in Underground Natural Gas Storage in the U.S., 1997-2000



Sources: Energy Information Administration, Form EIA-191, "Monthly Underground Gas Storage Report," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 10. Underground Natural Gas Storage - by Season, 1997-2000

(Volumes in Billion Cubic Feet)

Year, Season and Month	Natural Gas in Underground Storage at End of Period			Change In Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total	Volume	Percent	Injections	Withdrawals	Net Withdrawals ^a
October 1997	4,358	2,886	7,244	75	2.7	294	84	-210
1997-1998 Heating Season								
November	4,359	2,699	7,058	150	5.9	113	302	189
December	4,350	2,175	6,525	2	0.1	45	579	533
January	4,347	1,712	6,060	215	14.5	69	538	468
February	4,342	1,426	5,768	286	25.2	75	365	291
March	4,342	1,183	5,524	192	19.4	136	382	246
Total	—	—	—	—	—	438	2,165	1,727
1998 Refill Season								
April	4,339	1,386	5,725	334	31.9	280	80	-200
May	4,341	1,774	6,114	407	29.9	433	42	-391
June	4,335	2,114	6,449	381	22.1	379	52	-327
July	4,378	2,428	6,806	409	20.4	371	54	-317
August	4,340	2,698	7,038	358	15.4	336	58	-278
September	4,341	2,928	7,269	253	9.6	298	74	-224
October	4,342	3,191	7,533	302	10.6	308	46	-262
Total	—	—	—	—	—	2,405	407	-1,998
1998-1999 Heating Season								
November	4,344	3,155	7,499	453	16.9	137	168	31
December	4,326	2,730	7,056	554	25.5	83	519	436
January	4,327	2,094	6,421	381	22.2	55	678	623
February	4,312	1,792	6,104	372	26.2	62	395	333
March	^b 4,361	^b 1,430	5,792	246	20.7	84	381	297
Total	—	—	—	—	—	422	2,141	1,719
1999 Refill Season								
April	4,355	1,514	5,869	131	9.5	203	112	-91
May	4,346	1,847	6,192	72	4.0	380	43	-337
June	4,344	2,157	6,501	54	2.6	345	40	-306
July	4,350	2,390	6,740	-27	-1.1	303	78	-225
August	4,342	2,632	6,974	-66	-2.4	309	70	-238
September	4,360	2,884	7,245	-43	-1.5	352	42	-310
October	4,360	3,026	7,386	-165	-5.2	238	90	-148
Total	—	—	—	—	—	2,130	474	-1,656
1999-2000 Heating Season								
November	4,364	2,991	7,355	-164	-5.2	170	200	30
December	4,373	2,509	6,881	-221	-8.1	54	568	514
January	4,363	1,725	6,088	-370	-17.6	48	829	780
February	4,371	1,300	5,672	-491	-27.4	78	532	454
March	4,364	1,150	5,514	-280	-19.6	132	294	162
Total	—	—	—	—	—	482	2,423	1,940
2000 Refill Season								
April	4,363	1,184	5,547	-329	-21.8	181	145	-36
May	4,356	1,426	5,782	-420	-22.8	308	75	-232
June	4,355	1,706	6,061	-450	-20.9	339	67	-272
July	4,355	1,996	6,351	-394	-16.5	368	77	-290
August	4,355	2,190	6,544	-442	-16.8	296	102	-193
September(STIFS)	^E 4,355	^{RE} 2,500	^{RE} 6,855	^{RE} -385	^{RE} -13.3	^{NA}	^{NA}	^E -310
October(STIFS)	^E 4,355	^E 2,757	^E 7,112	^E -269	^E -8.9	^{NA}	^{NA}	^E -257
Total	—	—	—	—	—	^{NA}	^{NA}	-1,590

^a Negative numbers indicate the volume of injections in excess of withdrawals. Positive numbers indicate the volume of withdrawals in excess of injections.

^b Reflects one respondent's reclassification of natural gas in underground storage from working gas to base gas.

^E Estimated Data.

^{RE} Revised Estimated Data.

^{NA} Not Available.

— Not Applicable.

Notes: Data for 1997 and 1998 are final. All other data are preliminary unless otherwise noted. Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). See Explanatory

Note 7 for discussion of revision policy. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia.

Sources: Form EIA-191, "Underground Natural Gas Storage Report," Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and STIFS.

Table 11. Underground Natural Gas Storage - Salt Cavern Storage Fields, 1994 - 2000
(Volumes in Billion Cubic Feet)

Year and Month	Natural Gas in Salt Cavern Underground Storage at End of Period			Change in Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total	Volume	Percent	Injections	Withdrawals	Net Withdrawals
1994 Total^a	44	70	113	—	—	142	123	-19
1995 Total^a	60	72	131	2	2.9	194	200	5
1996 Total^a	64	85	149	14	18.8	258	246	-13
1997 Total^a	67	83	150	-4	-3.0	267	274	6
1998								
January	67	69	136	10	21.6	18	31	13
February	66	69	135	18	39.1	18	21	3
March	68	64	131	8	13.8	23	29	6
April	68	80	149	22	38.7	30	12	-18
May	68	83	151	9	12.9	26	23	-3
June	66	83	149	3	4.1	21	23	2
July	66	91	157	25	38.0	26	18	-8
August	66	92	158	25	38.8	24	22	-2
September	67	83	151	5	7.4	24	33	9
October	67	116	183	22	24.4	45	12	-33
November	68	119	186	23	24.5	23	18	-5
December	67	104	171	21	26.0	18	33	15
Total	—	—	—	—	—	297	275	-22
1999								
January	69	84	153	14	19.6	19	41	22
February	67	77	144	10	14.3	15	20	5
March	67	68	135	4	6.0	18	26	8
April	67	77	144	-3	-3.8	27	18	-9
May	67	94	161	11	13.4	29	12	-17
June	65	102	167	19	22.6	21	15	-6
July	65	94	160	3	3.0	16	24	8
August	66	102	168	9	9.6	22	14	-8
September	66	113	179	29	35.0	23	13	-10
October	67	114	181	-1	-1.2	21	19	-1
November	67	122	189	4	3.4	21	17	-4
December	67	100	167	-4	-4.1	18	33	15
Total	—	—	—	—	—	249	253	4
2000								
January	68	75	143	-9	-10.4	15	49	34
February	69	66	135	-11	-14.4	23	21	-2
March	69	69	139	2	2.4	24	20	-4
April	70	74	144	-3	-3.8	24	19	-5
May	70	77	147	-17	-17.9	27	24	-3
June	70	89	160	-13	-12.6	28	15	-12
July	72	97	168	3	2.7	30	21	-9
August	72	88	161	-14	-13.5	21	30	9

^a Total as of December 31.

— Not Applicable.

Notes: Data for 1994 through 1998 are final. All other data are preliminary unless otherwise noted. See Explanatory Note 7 for discussion of the reporting of underground storage information. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due

to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia. Positive net withdrawals indicate the volume of withdrawals in excess of injections. Negative net withdrawals indicate the volume of injections in excess of withdrawals.

Sources: Form EIA-191, "Monthly Underground Gas Storage Report," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 12. Underground Natural Gas Storage - Storage Fields Other than Salt Caverns, 1994-2000

(Volumes in Billion Cubic Feet)

Year and Month	Natural Gas in Non-Salt Cavern Underground Storage at End of Period			Change in Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total	Volume	Percent	Injections	Withdrawals	Net Withdrawals
1994 Total^a	4,317	2,536	6,853	—	—	2,654	2,385	-269
1995 Total^a	4,290	2,082	6,371	-455	-17.9	2,372	2,774	403
1996 Total^a	4,277	2,087	6,364	6	0.3	2,647	2,665	18
1997 Total^a	4,283	2,092	6,375	4	0.2	2,533	2,551	18
1998								
January	4,281	1,643	5,923	203	14.2	51	507	456
February	4,276	1,357	5,633	267	24.5	57	344	287
March	4,274	1,119	5,393	184	19.8	113	353	240
April	4,271	1,306	5,576	312	31.5	250	68	-182
May	4,272	1,691	5,963	398	30.9	407	20	-387
June	4,269	2,030	6,300	378	23.0	358	29	-329
July	4,312	2,337	6,649	385	19.8	345	36	-309
August	4,274	2,606	6,880	332	14.7	312	37	-275
September	4,273	2,844	7,118	247	9.6	274	41	-233
October	4,275	3,076	7,350	280	10.1	263	34	-229
November	4,276	3,036	7,313	430	16.6	114	150	36
December	4,259	2,626	6,884	532	25.5	64	485	421
Total	—	—	—	—	—	2,608	2,103	-504
1999								
January	4,257	2,010	6,268	367	22.4	37	638	601
February	4,245	1,714	5,960	363	26.8	47	375	328
March	4,294	1,363	5,657	242	21.6	67	355	289
April	4,288	1,437	5,725	134	10.3	175	94	-81
May	4,279	1,753	6,031	61	3.6	351	31	-320
June	4,279	2,055	6,333	35	1.7	324	24	-300
July	4,285	2,296	6,581	-30	-1.3	287	54	-233
August	4,276	2,530	6,806	-75	-2.9	287	56	-231
September	4,294	2,772	7,066	-73	-2.5	329	29	-300
October	4,293	2,912	7,205	-164	-5.3	217	70	-147
November	4,297	2,869	7,166	-168	-5.5	149	183	34
December	4,306	2,409	6,715	-217	-8.3	36	535	499
Total	—	—	—	—	—	2,306	2,444	138
2000								
January	4,295	1,649	5,944	-361	-17.9	33	779	746
February	4,302	1,234	5,537	-480	-28.0	55	511	455
March	4,295	1,080	5,375	-282	-20.7	109	274	166
April	4,293	1,110	5,403	-326	-22.7	156	126	-30
May	4,285	1,349	5,635	-403	-23.0	280	51	-229
June	4,284	1,617	5,902	-437	-21.3	312	52	-260
July	4,284	1,899	6,183	-397	-17.3	338	56	-282
August	4,283	2,101	6,384	-428	-16.9	275	73	-202

^a Total as of December 31.

— Not Applicable.

Notes: Data for 1994 through 1998 are final. All other data are preliminary unless otherwise noted. See Explanatory Note 7 for discussion of the reporting of underground storage information. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due

to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia. Positive net withdrawals indicate the volume of withdrawals in excess of injections. Negative net withdrawals indicate the volume of injections in excess of withdrawals.

Sources: Form EIA-191, "Monthly Underground Gas Storage Report," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 13. Net Withdrawals from Underground Storage, by State, 1998-2000
(Volumes in Million Cubic Feet)

State	2000					
	August	July	June	May	April	March
Alabama	0	-82	-594	-90	66	-8
Arkansas	-680	-649	-444	-698	-287	997
California	19,352	445	-6,789	-10,967	-19,885	-3,144
Colorado	-4,786	-4,625	-4,611	-751	1,382	6,707
Illinois	-28,597	-28,764	-33,160	-13,295	13,190	8,776
Indiana	-2,742	-2,234	-1,939	-258	1,350	2,031
Iowa	-11,670	-10,921	-5,856	-4,399	1,706	5,207
Kansas	-987	-9,930	-9,788	-6,106	2,275	11,548
Kentucky	-6,477	-10,659	-6,185	-4,062	3,470	6,759
Louisiana	-12,898	-23,151	-22,366	-4,878	9,828	19,976
Maryland	-2,244	-2,002	-2,999	-2,480	-633	-65
Michigan	-52,904	-49,908	-45,556	-48,446	-6,666	44,807
Minnesota	-272	-343	-131	2	116	301
Mississippi	-3,417	-5,252	-5,226	-4,057	527	-1,228
Missouri	215	17	20	-25	103	-98
Montana	-2,261	-2,039	-456	522	621	2,164
Nebraska	225	-620	1,077	-78	-92	42
New Mexico	1,041	800	-794	-469	-2,587	208
New York	-7,494	-10,087	-9,999	-8,663	-2,854	6,360
Ohio	-24,973	-33,090	-21,527	-28,909	-5,163	24,219
Oklahoma	1,344	-2,413	-9,952	-9,562	-5,856	2,165
Oregon	-2,017	-2,209	-2,043	-869	783	1,766
Pennsylvania	-32,838	-52,073	-42,668	-52,902	-7,196	11,168
Tennessee	0	0	0	0	18	63
Texas	13,808	-1,272	-7,124	-2,892	-10,396	-9,237
Utah	-6,540	-6,654	-5,712	-5,531	-4,447	3,012
Virginia	-212	-214	-214	-278	-114	32
Washington	909	-3,739	-3,660	-2,639	-893	1,485
West Virginia	-25,345	-28,215	-22,374	-18,051	-4,487	14,440
Wyoming	-897	-517	-1,168	-1,590	507	1,332
AGA Regions						
Producing	-1,789	-41,867	-55,693	-28,663	-6,496	24,430
Eastern Consuming	-195,056	-228,850	-191,974	-181,936	-7,304	123,733
Western Consuming	3,486	-19,680	-24,570	-21,823	-21,815	13,622
Total	-193,359	-290,397	-272,238	-232,422	-35,615	161,785

See footnotes at end of table.

Table 13. Net Withdrawals from Underground Storage, by State, 1998-2000

(Volumes in Million Cubic Feet) — Continued

State	2000		1999				
	February	January	Total	December	November	October	September
Alabama	-307	916	-164	189	-134	77	-402
Arkansas	1,228	1,722	233	1,276	423	-219	-237
California	21,871	27,322	-1,134	23,168	-4,713	-4,840	-9,773
Colorado	3,627	6,198	-1,151	5,102	-875	-2,419	-4,873
Illinois	34,403	59,032	-492	38,144	2,249	-28,933	-38,601
Indiana	1,448	7,049	187	4,137	-2,154	-3,753	-4,225
Iowa	11,385	21,126	846	21,305	1,096	-10,941	-13,108
Kansas	9,643	25,461	16,997	22,749	979	-1,014	-14,496
Kentucky	10,109	21,162	2,256	10,764	2,283	-1,117	-10,052
Louisiana	38,771	52,444	-4,822	31,136	4,760	-12,129	-32,350
Maryland	3,384	5,481	-78	1,417	459	-3,376	-1,411
Michigan	80,436	162,410	33,967	97,764	6,940	-21,286	-45,478
Minnesota	298	401	-253	147	-128	-175	-272
Mississippi	-595	11,377	14,304	8,997	-2,641	1,133	-2,086
Missouri	-548	1,122	-557	341	-174	-205	-408
Montana	3,191	4,177	8,194	2,673	1,189	519	-1,472
Nebraska	1,313	1,019	-294	491	-298	-477	-1,732
New Mexico	1,034	1,032	-2,293	814	-1,202	-260	-2,232
New York	13,702	18,533	8,773	12,598	1,472	-938	-5,725
Ohio	36,569	58,844	15,699	43,488	8,486	-9,284	-25,111
Oklahoma	36,526	45,987	-10,508	15,213	-2,795	-11,483	-15,540
Oregon	1,566	2,088	-409	1,381	-592	0	-1,542
Pennsylvania	66,917	111,718	20,463	68,921	4,194	-19,002	-41,487
Tennessee	63	175	-28	164	56	-57	-105
Texas	34,595	54,376	387	38,053	-770	-11,096	-10,532
Utah	7,585	10,093	9,193	12,584	957	-1,889	-4,860
Virginia	105	695	129	467	182	-110	-418
Washington	2,566	7,755	-2,543	1,684	-38	-1,402	-402
West Virginia	30,334	57,742	35,234	46,582	10,697	-3,299	-20,378
Wyoming	2,373	2,935	-995	2,378	545	-306	-1,030
AGA Regions							
Producing	121,202	192,398	14,300	118,238	-1,246	-35,067	-77,473
Eastern Consuming	289,313	527,024	115,941	346,773	35,355	-102,700	-208,641
Western Consuming	43,076	60,969	10,902	49,118	-3,655	-10,511	-24,223
Total	453,592	780,391	141,142	514,128	30,454	-148,279	-310,337

See footnotes at end of table.

Table 13. Net Withdrawals from Underground Storage, by State, 1998-2000

(Volumes in Million Cubic Feet) — Continued

State	1999						
	August	July	June	May	April	March	February
Alabama	-81	-235	-210	-471	-137	312	114
Arkansas	-901	-1,116	-1,086	-1,045	-667	690	1,049
California	2,919	-11,199	-20,737	-27,111	-911	9,782	18,491
Colorado	-5,436	-6,692	-5,526	-307	8,881	3,319	3,684
Illinois	-30,924	-23,880	-24,188	-27,851	7,599	27,580	41,907
Indiana	-2,797	-1,681	-1,625	-758	921	3,622	2,942
Iowa	-12,914	-10,783	-6,837	-4,596	86	5,170	11,814
Kansas	-9,796	-3,006	-17,080	-12,144	5,085	13,977	9,273
Kentucky	-1,241	-3,773	-10,131	-8,328	-2,297	6,081	7,825
Louisiana	-3,569	-3,546	-19,988	-22,324	-16,632	10,263	15,966
Maryland	-1,954	1,324	93	-2,551	-667	1,208	1,982
Michigan	-50,880	-51,556	-51,441	-49,536	-23,148	53,123	57,189
Minnesota	-250	-308	-172	0	214	167	238
Mississippi	-1,088	852	-3,642	-5,105	-2,240	6,840	3,303
Missouri	-64	6	6	-697	-27	150	343
Montana	-2,542	-1,794	-1,784	-568	1,329	2,410	3,375
Nebraska	-1,004	478	-697	-701	1,168	1,338	442
New Mexico	-841	-172	-443	-1,371	1,025	943	83
New York	-6,853	-5,915	-6,909	-9,935	-5,300	10,688	10,057
Ohio	-27,587	-27,798	-27,954	-33,732	-5,317	33,698	33,362
Oklahoma	-1,222	-748	-9,556	-14,068	-8,791	8,079	-881
Oregon	-1,313	-2,114	-2,013	168	735	1,185	1,717
Pennsylvania	-37,841	-27,925	-36,090	-44,102	-24,525	44,023	50,445
Tennessee	-104	-76	-107	-143	3	80	131
Texas	-7,923	-6,519	-21,602	-30,819	-15,510	14,152	9,654
Utah	-4,582	-7,489	-5,915	-3,772	1,667	5,738	6,185
Virginia	-207	-209	-211	-273	-184	325	449
Washington	-2,951	-3,595	-1,765	-786	1,852	1,113	3,144
West Virginia	-22,999	-23,517	-26,426	-32,000	-13,958	30,271	36,278
Wyoming	-1,371	-2,294	-1,661	-2,132	-990	352	2,050
AGA Regions							
Producing	-25,340	-14,255	-73,397	-86,875	-37,730	54,944	38,447
Eastern Consuming	-197,450	-175,542	-192,727	-215,674	-65,782	217,668	255,282
Western Consuming	-15,526	-35,485	-39,575	-34,509	12,778	24,066	38,885
Total	-238,316	-225,282	-305,699	-337,059	-90,735	296,678	332,615

See footnotes at end of table.

Table 13. Net Withdrawals from Underground Storage, by State, 1998-2000

(Volumes in Million Cubic Feet) — Continued

State	1999	1998					
	January	Total	December	November	October	September	August
Alabama	813	-447	139	-1	-613	401	-200
Arkansas	2,066	-1,774	1,245	63	-580	-817	-1,005
California	23,789	-40,969	30,486	-14,022	-23,861	-5,931	-7,171
Colorado	3,990	-5,072	7,324	-1,757	-2,045	-5,894	-5,866
Illinois	56,407	-9,780	42,407	9,311	-30,361	-39,382	-32,631
Indiana	5,558	-921	4,063	-2,296	-2,901	-4,532	-4,058
Iowa	20,553	-2,954	20,920	-178	-7,251	-12,282	-10,097
Kansas	22,470	-18,691	14,533	3,580	-8,545	-9,036	-11,957
Kentucky	12,241	-11,700	10,352	1,731	-5,424	-4,214	-7,859
Louisiana	43,591	-82,860	38,463	1,355	-36,341	-9,007	-20,195
Maryland	3,399	-876	1,882	29	-1,312	-809	-1,413
Michigan	112,276	-74,840	60,982	18,759	-27,000	-30,308	-52,147
Minnesota	287	372	438	-84	-187	-275	-284
Mississippi	9,981	-10,185	5,464	702	-10,304	268	-4,119
Missouri	170	173	573	-204	-208	-414	-203
Montana	4,860	-400	3,962	2,606	-1,532	-4,239	-4,524
Nebraska	698	1,466	1,336	625	-308	-778	-524
New Mexico	1,364	-6,479	-619	-1,243	-1,903	-470	-919
New York	15,534	-10,656	6,889	1,047	-4,424	-5,650	-5,731
Ohio	53,448	-26,672	35,491	7,882	-12,789	-19,356	-27,403
Oklahoma	31,284	-48,008	24,711	106	-19,358	-12,262	-7,283
Oregon	1,979	-1,278	1,329	49	9	-1,141	-1,143
Pennsylvania	83,851	-40,009	46,685	858	-20,516	-28,003	-19,997
Tennessee	130	-62	131	-2	-103	-102	-112
Texas	43,297	-102,117	36,724	-2,512	-34,274	-4,692	-12,193
Utah	10,569	676	6,533	2,087	-1,821	-3,970	-3,554
Virginia	317	-510	371	47	-204	-244	-322
Washington	603	-539	3,223	-732	718	-1,825	-3,645
West Virginia	53,983	-28,267	27,238	3,983	-6,935	-16,431	-29,122
Wyoming	3,464	-2,719	2,677	-590	-1,425	-2,614	-2,007
AGA Regions							
Producing	154,055	-270,114	120,522	2,052	-111,305	-36,017	-57,671
Eastern Consuming	419,379	-206,056	259,459	41,592	-120,349	-162,103	-191,819
Western Consuming	49,540	-49,929	55,973	-12,444	-30,145	-25,888	-28,194
Total	622,974	-526,099	435,953	31,200	-261,799	-224,007	-277,684

Notes: This table contains total net withdrawals for each State with natural gas storage facilities. Positive numbers indicate the volume of withdrawals in excess of injections. Negative values indicate the volume of injections in excess of withdrawals. Data through 1998 are final. All other data are preliminary at this time and are not considered final until publication of the *Natural Gas Annual* for that year. The American Gas Association (AGA) publishes weekly estimates of working gas levels in underground storage by

region. AGA defines the Producing Region as Texas, Oklahoma, Kansas, New Mexico, Louisiana, Arkansas, and Mississippi; the Eastern Consuming Region as all States east of the Mississippi River less Mississippi, plus Iowa, Nebraska and Missouri; the Western Consuming Region as all States west of the Mississippi River less the Producing Region and Iowa, Nebraska and Missouri.

Source: Form EIA-191, "Monthly Underground Gas Storage Report."

**Table 14. Activities of Underground Natural Gas Storage Operators, by State,
August 2000**

(Volumes in Million Cubic Feet)

State	Total Storage Capacity	Natural Gas in Underground Storage at End of Period			Change in Working Gas from Same Period Previous Year		Storage Activity	
		Base Gas	Working Gas	Total	Volume	Percent	Injections	Withdrawals
Alabama	3,280	1,190	1,890	3,080	381	25.3	0	0
Arkansas	24,191	8,715	6,157	14,872	-2,348	-27.6	684	4
California	388,370	246,825	140,787	387,612	-32,041	-18.5	1,021	20,373
Colorado	99,600	48,255	33,184	81,438	173	0.5	5,487	701
Illinois	898,565	675,870	174,487	850,357	-21,848	-11.1	29,393	796
Indiana	113,210	73,873	26,241	100,115	877	3.5	2,770	28
Iowa	273,200	196,700	40,142	236,842	-8,944	-18.2	12,012	342
Kansas	301,102	179,218	56,187	235,405	-28,847	-33.9	8,093	7,106
Kentucky	219,908	109,311	77,462	186,773	-15,256	-16.5	6,622	145
Louisiana	564,062	272,157	141,886	414,044	-74,233	-34.3	23,613	10,716
Maryland	62,000	46,677	14,448	61,125	4,442	44.4	2,365	121
Michigan	1,071,699	467,705	427,300	895,005	-34,110	-7.4	57,981	5,077
Minnesota	7,000	4,623	1,812	6,435	57	3.3	342	70
Mississippi	134,012	76,855	45,551	122,406	2,385	5.5	8,827	5,411
Missouri	31,274	21,600	9,024	30,624	-360	-3.8	0	215
Montana	371,510	167,347	32,459	199,805	-8,744	-21.2	2,805	543
Nebraska	39,469	29,709	2,577	32,286	1,079	72.1	187	412
New Mexico	96,600	29,766	8,814	38,580	409	4.9	1,217	2,258
New York	175,129	96,583	62,964	159,548	-317	-0.5	7,789	295
Ohio	575,384	349,715	144,300	494,015	-12,901	-8.2	25,455	482
Oklahoma	394,827	209,417	79,426	288,843	-47,517	-37.4	9,757	11,101
Oregon	11,623	6,834	8,501	15,335	1,688	24.8	2,017	0
Pennsylvania	684,842	352,715	285,848	638,563	-18,818	-6.2	38,577	5,739
Tennessee	1,200	340	371	711	-274	-42.4	0	0
Texas	684,226	249,168	172,513	421,681	-110,644	-39.1	14,383	28,191
Utah	121,980	64,595	37,899	102,494	1,480	4.1	6,698	158
Virginia	4,669	2,152	2,215	4,366	385	21.0	212	0
Washington	37,300	19,000	14,799	33,799	-1,880	-11.3	807	1,716
West Virginia	733,158	287,141	120,518	407,658	-32,429	-21.2	25,746	400
Wyoming	105,869	60,762	19,759	80,521	-4,096	-17.2	915	19
AGA Regions								
Producing	2,199,020	1,025,295	510,535	1,535,829	-260,795	-33.8	66,574	64,785
Eastern Consuming	4,886,987	2,711,281	1,389,789	4,101,070	-138,092	-9.0	209,108	14,052
Western Consuming	1,143,251	618,241	289,200	907,441	-43,363	-13.0	20,093	23,579
Total	8,229,259	4,354,816	2,189,524	6,544,340	-442,250	-16.8	295,775	102,416

Notes: Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia. The American Gas Association (AGA) publishes weekly estimates of working

gas levels in underground storage by region. AGA defines the Producing Region as Texas, Oklahoma, Kansas, New Mexico, Louisiana, Arkansas, and Mississippi; the Eastern Consuming Region as all States east of the Mississippi River less Mississippi, plus Iowa, Nebraska and Missouri; the Western Consuming Region as all States west of the Mississippi River less the Producing Region and Iowa, Nebraska and Missouri.

Source: Form EIA-191, "Monthly Underground Gas Storage Report."

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1998-2000
(Million Cubic Feet)

State	YTD 2000	YTD 1999	YTD 1998	2000		
				July	June	May
Alabama	30,883	30,617	35,929	1,218	1,351	2,267
Alaska	9,219	10,267	8,763	474	645	864
Arizona	22,559	23,366	26,448	1,053	1,245	1,596
Arkansas	NA	26,869	28,131	NA	NA	NA
California	317,688	395,092	371,078	24,464	27,655	31,747
Colorado	NA	78,993	77,509	NA	NA	NA
Connecticut	27,918	26,770	24,378	961	1,270	2,244
Delaware	6,817	6,543	5,720	246	294	655
District of Columbia	10,188	NA	9,472	367	470	717
Florida	9,761	8,901	10,142	738	836	973
Georgia	NA	NA	72,843	3,865	NA	4,803
Hawaii	328	320	331	44	45	47
Idaho	11,735	12,172	10,790	430	621	892
Illinois	266,776	284,975	259,494	9,555	12,058	15,622
Indiana	NA	NA	94,030	NA	NA	6,240
Iowa	43,942	48,745	46,133	1,551	1,611	2,658
Kansas	47,233	NA	50,283	1,697	1,917	3,099
Kentucky	35,959	38,110	35,693	1,078	1,131	1,424
Louisiana	NA	30,129	34,792	NA	1,798	1,986
Maine	NA	593	569	NA	NA	NA
Maryland	52,841	NA	45,700	1,913	2,233	3,313
Massachusetts	NA	NA	71,070	NA	NA	NA
Michigan	231,961	239,753	217,384	7,668	9,582	18,230
Minnesota	NA	76,705	69,158	2,875	3,369	4,940
Mississippi	NA	NA	18,520	724	805	1,147
Missouri	70,540	82,124	80,633	2,475	2,178	4,816
Montana	11,600	12,502	11,958	470	590	947
Nebraska	27,500	28,526	29,620	897	977	1,426
Nevada	NA	19,398	20,158	1,009	1,184	1,568
New Hampshire	5,075	4,666	4,353	249	293	451
New Jersey	141,404	137,728	135,388	5,602	^R 6,198	^R 11,007
New Mexico	NA	21,215	22,167	NA	1,646	1,163
New York	NA	NA	233,811	NA	NA	NA
North Carolina	41,628	38,536	37,886	1,025	1,510	2,265
North Dakota	NA	7,312	6,772	212	333	502
Ohio	208,303	213,760	193,113	7,200	7,670	13,488
Oklahoma	40,937	45,690	50,163	1,586	1,821	2,683
Oregon	25,709	26,281	22,803	1,003	1,537	2,322
Pennsylvania	NA	164,807	146,574	NA	NA	NA
Rhode Island	16,826	12,104	11,651	482	715	1,279
South Carolina	18,993	18,134	19,394	494	576	1,140
South Dakota	7,493	8,088	7,811	248	333	573
Tennessee	NA	NA	43,248	1,208	NA	2,544
Texas	NA	117,203	139,231	NA	6,864	8,138
Utah	29,911	33,203	33,454	1,492	1,494	1,809
Vermont	1,998	1,837	1,680	70	110	179
Virginia	49,332	NA	42,876	1,654	1,898	3,000
Washington	NA	NA	43,548	NA	NA	NA
West Virginia	NA	NA	20,449	521	749	1,902
Wisconsin	78,724	80,406	73,665	2,699	2,658	5,018
Wyoming	7,375	8,042	8,462	315	407	658
Total	3,125,720	3,190,560	3,065,226	131,821	^R152,651	^R225,630

See footnotes at end of table.

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1998-2000

(Million Cubic Feet) — Continued

State	2000				1999	
	April	March	February	January	Total	December
Alabama	3,391	4,694	9,492	8,470	43,592	5,881
Alaska	1,233	1,764	1,885	2,354	17,634	2,466
Arizona	2,814	4,430	4,618	6,804	32,827	4,643
Arkansas	NA	NA	NA	NA	NA	4,645
California	39,017	62,814	65,301	66,689	568,355	65,661
Colorado	NA	NA	NA	NA	113,871	15,043
Connecticut	3,216	5,018	7,692	7,516	38,023	4,781
Delaware	985	1,178	1,661	1,800	8,845	1,114
District of Columbia	1,232	1,691	3,013	2,698	NA	988
Florida	1,140	1,631	2,360	2,084	13,527	1,526
Georgia	8,727	11,080	17,688	26,740	NA	20,953
Hawaii	46	48	49	48	524	42
Idaho	1,663	2,210	2,602	3,317	17,870	2,508
Illinois	35,416	45,616	63,987	84,522	445,054	73,446
Indiana	12,785	NA	NA	30,851	NA	22,815
Iowa	5,392	7,679	10,990	14,061	71,541	10,649
Kansas	5,994	8,529	12,303	13,693	NA	9,572
Kentucky	4,135	6,224	8,287	13,682	59,662	10,875
Louisiana	3,693	4,355	7,622	8,400	44,525	5,696
Maine	89	123	133	202	960	151
Maryland	6,430	8,673	14,316	15,964	NA	10,623
Massachusetts	NA	NA	NA	NA	NA	NA
Michigan	32,413	42,048	58,759	63,259	349,334	47,305
Minnesota	9,700	12,806	NA	NA	NA	NA
Mississippi	NA	2,481	4,931	5,121	NA	3,161
Missouri	9,181	12,838	17,895	21,157	112,803	14,561
Montana	1,514	2,231	2,729	3,119	19,684	2,842
Nebraska	4,515	5,735	6,728	7,223	40,412	5,117
Nevada	2,027	3,711	3,861	NA	28,924	4,420
New Hampshire	641	938	1,274	1,229	6,626	783
New Jersey	^R 17,683	^R 25,174	^R 37,760	^R 37,980	^R 195,201	^R 21,366
New Mexico	3,438	3,447	4,437	5,183	35,753	6,304
New York	NA	NA	NA	NA	NA	NA
North Carolina	4,531	7,685	13,396	11,216	53,069	6,933
North Dakota	929	1,323	1,698	NA	NA	NA
Ohio	27,892	37,454	52,516	62,083	NA	46,581
Oklahoma	5,193	7,170	11,476	11,008	62,023	7,527
Oregon	3,493	5,032	5,678	6,643	37,974	5,309
Pennsylvania	NA	29,809	NA	48,155	240,754	34,006
Rhode Island	1,812	2,581	7,100	2,857	16,601	1,736
South Carolina	1,917	2,877	6,438	5,552	25,708	3,805
South Dakota	1,059	1,360	1,772	2,149	11,766	1,628
Tennessee	4,625	6,488	12,515	14,395	NA	6,612
Texas	14,250	17,287	31,342	56,893	167,593	21,575
Utah	2,967	6,792	7,038	8,319	55,474	9,614
Vermont	268	396	510	465	2,585	296
Virginia	5,637	8,520	13,778	14,846	NA	10,564
Washington	NA	NA	NA	NA	NA	NA
West Virginia	2,496	NA	6,316	5,319	NA	NA
Wisconsin	11,182	13,084	18,644	25,439	127,909	21,789
Wyoming	1,227	1,441	1,666	1,661	11,926	1,525
Total	^R395,462	^R551,254	^R776,985	^R891,916	^R4,715,352	^R663,188

See footnotes at end of table.

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1998-2000
(Million Cubic Feet) — Continued

State	1999					
	November	October	September	August	July	June
Alabama	3,137	1,594	1,212	1,151	1,287	1,387
Alaska	2,127	1,423	870	481	486	559
Arizona	1,682	1,165	1,006	963	1,065	1,352
Arkansas	NA	1,238	980	952	998	1,030
California	34,480	25,260	24,491	23,371	25,721	32,952
Colorado	8,328	5,670	3,035	2,802	3,145	4,769
Connecticut	3,046	1,513	1,061	853	1,060	1,242
Delaware	575	278	169	168	201	254
District of Columbia	1,028	483	325	315	NA	399
Florida	944	738	709	709	759	802
Georgia	11,967	7,328	4,086	2,389	2,246	1,525
Hawaii	36	44	41	41	45	43
Idaho	1,526	867	436	359	428	645
Illinois	38,561	26,429	12,550	9,093	9,972	11,127
Indiana	11,612	7,298	3,249	2,775	2,810	3,467
Iowa	5,611	3,470	1,833	1,233	1,825	1,597
Kansas	4,233	2,807	1,572	1,696	1,556	2,170
Kentucky	5,456	2,628	1,402	1,190	1,174	1,336
Louisiana	3,249	2,069	1,733	1,649	1,761	1,908
Maine	95	69	27	25	22	26
Maryland	6,241	3,525	1,951	1,733	NA	2,172
Massachusetts	NA	NA	NA	NA	NA	NA
Michigan	29,664	18,342	7,838	6,432	6,908	10,413
Minnesota	NA	7,112	3,367	2,523	2,243	3,103
Mississippi	1,650	883	717	690	784	813
Missouri	6,894	4,181	2,748	2,296	2,557	3,089
Montana	1,983	1,342	636	378	518	645
Nebraska	2,727	2,131	792	1,118	1,003	1,180
Nevada	2,008	1,214	958	926	945	1,240
New Hampshire	563	311	161	142	153	195
New Jersey	^R 16,938	^R 9,627	^R 5,068	^R 4,475	^R 4,698	^R 5,829
New Mexico	4,107	2,293	1,029	805	956	1,123
New York	NA	NA	NA	NA	NA	NA
North Carolina	3,954	1,684	1,037	924	1,118	1,316
North Dakota	960	662	301	197	232	266
Ohio	27,730	17,320	6,865	NA	6,624	7,972
Oklahoma	3,631	2,219	1,513	1,444	1,657	1,923
Oregon	3,060	1,592	921	811	839	1,635
Pennsylvania	19,778	11,580	5,776	4,808	5,112	6,518
Rhode Island	1,227	691	445	399	448	557
South Carolina	2,096	737	488	448	492	570
South Dakota	918	607	300	224	274	324
Tennessee	4,257	1,936	1,526	1,162	1,066	1,422
Texas	10,810	6,857	5,848	5,300	5,982	6,729
Utah	5,321	3,567	2,285	1,484	2,254	1,648
Vermont	214	124	59	57	56	77
Virginia	5,707	2,928	1,488	1,404	1,524	1,605
Washington	NA	NA	NA	NA	NA	NA
West Virginia	NA	1,349	688	NA	533	656
Wisconsin	11,462	7,988	3,442	2,821	2,675	3,272
Wyoming	879	746	508	226	310	497
Total	^R373,854	^R233,840	^R136,871	^R117,040	^R127,661	^R154,196

See footnotes at end of table.

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1998-2000

(Million Cubic Feet) — Continued

State	1999					1998
	May	April	March	February	January	Total
Alabama	1,914	3,979	6,535	6,297	9,218	46,544
Alaska	939	1,315	2,075	2,223	2,668	15,617
Arizona	2,109	3,319	3,694	5,415	6,411	36,100
Arkansas	1,641	3,732	5,157	5,260	9,049	38,190
California	40,596	62,112	67,403	77,973	88,334	549,931
Colorado	9,761	10,816	13,735	15,467	21,300	110,839
Connecticut	1,879	3,623	5,780	6,082	7,104	35,329
Delaware	497	989	1,574	1,469	1,560	7,755
District of Columbia	687	1,269	2,324	2,309	2,915	13,249
Florida	841	1,217	1,651	1,500	2,130	14,102
Georgia	NA	4,937	11,239	13,564	17,037	107,398
Hawaii	44	46	44	48	49	535
Idaho	1,244	1,875	2,257	2,633	3,090	16,002
Illinois	15,873	31,264	61,443	61,466	93,829	409,812
Indiana	5,926	NA	NA	NA	32,227	140,122
Iowa	3,082	5,544	9,861	10,655	16,180	68,901
Kansas	3,603	6,284	NA	NA	NA	70,217
Kentucky	1,806	4,113	9,268	8,782	11,632	55,545
Louisiana	2,264	3,754	5,450	5,871	9,121	47,574
Maine	40	76	131	133	165	910
Maryland	NA	6,125	NA	NA	14,660	68,057
Massachusetts	NA	NA	NA	17,836	12,570	102,062
Michigan	16,098	31,611	53,870	52,118	68,735	319,701
Minnesota	4,967	8,560	15,337	17,086	25,409	110,449
Mississippi	1,063	NA	3,299	3,016	5,463	24,847
Missouri	5,321	9,692	16,624	18,572	26,270	110,779
Montana	1,380	1,894	2,114	2,494	3,457	19,172
Nebraska	2,351	3,735	5,726	5,954	8,576	40,771
Nevada	1,853	2,718	3,349	4,332	4,962	30,023
New Hampshire	371	672	991	1,036	1,246	6,267
New Jersey	^R 9,802	^R 18,024	^R 30,361	^R 31,429	^R 37,584	196,658
New Mexico	1,650	2,431	4,439	4,092	6,524	35,877
New York	NA	NA	NA	NA	NA	339,512
North Carolina	2,605	5,341	9,456	7,485	11,215	50,786
North Dakota	627	984	1,318	1,565	2,320	10,092
Ohio	12,577	26,862	51,348	49,202	59,175	296,576
Oklahoma	3,079	6,228	8,399	9,446	14,958	66,521
Oregon	2,754	3,888	5,047	5,783	6,336	34,417
Pennsylvania	11,260	21,700	37,498	36,752	45,967	217,929
Rhode Island	949	1,702	2,704	2,662	3,083	16,461
South Carolina	1,195	2,226	4,375	3,588	5,687	25,430
South Dakota	629	1,140	1,486	1,719	2,516	11,646
Tennessee	NA	^R 4,735	^R 9,623	8,927	14,795	59,386
Texas	8,323	14,678	18,993	22,662	39,835	199,454
Utah	2,663	5,267	5,425	7,725	8,220	56,843
Vermont	159	284	377	387	496	2,454
Virginia	NA	5,135	11,359	11,272	13,064	63,186
Washington	NA	NA	NA	NA	NA	61,936
West Virginia	NA	NA	NA	4,946	6,230	29,664
Wisconsin	5,018	9,062	16,429	17,018	26,931	115,946
Wyoming	1,095	1,225	1,313	1,674	1,929	12,702
Total	^R234,952	^R420,169	^R665,229	^R684,716	^R903,636	4,520,276

^R Revised Data.

NA Not Available.

Notes: Geographic coverage is the 50 States and the District of Columbia.
See Appendix A, Explanatory Note 5 for discussion of computations and

revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1998-2000
(Million Cubic Feet)

State	YTD 2000	YTD 1999	YTD 1998	2000		
				July	June	May
Alabama	16,183	17,396	18,209	1,097	1,202	1,472
Alaska	12,170	15,675	15,687	1,036	844	1,477
Arizona	20,345	20,172	20,692	1,988	2,144	2,327
Arkansas	NA	NA	19,187	NA	NA	NA
California	141,240	169,196	152,241	16,242	15,268	17,080
Colorado	NA	NA	42,868	NA	NA	NA
Connecticut	29,888	30,517	27,213	2,450	2,271	3,341
Delaware	3,550	4,364	3,913	196	229	354
District of Columbia	11,596	NA	11,622	889	985	1,347
Florida	29,665	23,013	23,722	3,503	3,580	3,924
Georgia	NA	NA	37,548	1,359	NA	1,738
Hawaii	1,043	1,029	1,026	146	151	148
Idaho	8,152	8,372	7,649	451	545	672
Illinois	117,766	120,832	109,984	6,291	6,371	8,308
Indiana	NA	NA	47,309	2,427	NA	3,641
Iowa	27,435	29,695	27,983	1,443	1,316	2,561
Kansas	43,659	NA	29,553	4,017	3,903	4,409
Kentucky	23,333	23,119	20,789	1,089	1,181	1,529
Louisiana	NA	15,561	16,110	NA	1,346	1,493
Maine	NA	1,637	1,555	NA	NA	NA
Maryland	37,869	NA	36,803	2,235	2,799	3,752
Massachusetts	NA	NA	64,354	NA	NA	NA
Michigan	117,687	118,029	107,537	5,403	6,852	10,284
Minnesota	NA	56,622	50,435	2,944	2,934	4,057
Mississippi	NA	NA	14,091	981	992	1,296
Missouri	40,513	44,865	42,816	2,131	2,305	3,115
Montana	8,465	7,917	7,987	478	547	773
Nebraska	18,160	19,641	19,899	963	1,325	1,536
Nevada	15,496	14,090	15,406	1,787	1,628	1,772
New Hampshire	NA	NA	4,565	NA	NA	NA
New Jersey	135,574	133,907	93,606	10,260	^R 8,210	^R 7,078
New Mexico	16,876	19,284	17,435	1,299	1,965	1,892
New York	NA	NA	212,990	NA	35,054	NA
North Carolina	27,429	25,879	24,908	1,531	1,900	1,926
North Dakota	NA	6,990	6,481	275	358	517
Ohio	117,324	112,742	104,068	5,372	5,712	8,913
Oklahoma	22,533	26,876	30,654	1,618	1,249	2,001
Oregon	18,441	19,253	16,493	1,079	1,416	1,876
Pennsylvania	NA	93,030	84,713	6,173	8,570	NA
Rhode Island	8,769	8,072	7,814	448	548	738
South Carolina	13,463	13,049	13,122	1,111	1,168	1,356
South Dakota	6,194	6,523	6,152	287	334	528
Tennessee	NA	35,457	35,293	1,937	NA	2,515
Texas	NA	117,999	100,866	NA	11,059	15,377
Utah	17,535	18,702	18,864	953	952	1,237
Vermont	1,761	1,641	1,913	81	102	161
Virginia	40,507	38,431	38,171	2,964	3,343	3,911
Washington	NA	NA	30,736	NA	NA	NA
West Virginia	17,564	17,204	15,678	1,168	1,303	1,760
Wisconsin	49,582	54,285	50,329	2,177	2,395	3,675
Wyoming	6,511	6,137	6,575	641	438	598
Total	2,082,722	2,011,469	1,915,610	165,492	^R168,874	^R205,693

See footnotes at end of table.

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1998-2000

(Million Cubic Feet) — Continued

State	2000				1999	
	April	March	February	January	Total	December
Alabama	1,989	2,485	4,156	3,783	28,887	3,372
Alaska	1,688	2,242	2,070	2,812	27,122	3,432
Arizona	2,877	3,496	3,414	4,098	31,242	3,448
Arkansas	NA	NA	NA	NA	NA	1,176
California	19,106	23,659	23,459	26,427	262,681	22,066
Colorado	NA	NA	NA	NA	NA	7,790
Connecticut	3,783	5,601	7,072	5,370	47,328	5,281
Delaware	502	453	874	942	6,029	635
District of Columbia	1,717	2,045	2,274	2,340	NA	745
Florida	4,240	4,580	4,816	5,023	36,308	3,360
Georgia	3,152	3,971	6,448	8,848	NA	6,831
Hawaii	146	150	149	153	1,749	147
Idaho	1,120	1,486	1,722	2,156	12,624	1,668
Illinois	15,383	19,454	27,375	34,585	187,862	26,945
Indiana	6,486	8,474	12,980	NA	NA	NA
Iowa	3,336	4,411	6,245	8,123	44,813	6,400
Kansas	5,658	7,180	8,706	9,786	NA	4,675
Kentucky	2,569	3,778	6,411	6,775	35,626	5,357
Louisiana	1,821	1,923	2,796	2,804	23,724	2,098
Maine	104	NA	341	522	2,576	353
Maryland	5,006	6,603	8,382	9,093	NA	7,058
Massachusetts	NA	NA	NA	NA	NA	NA
Michigan	16,304	21,785	26,708	30,349	175,362	22,733
Minnesota	7,529	9,700	12,925	NA	89,025	12,542
Mississippi	NA	1,889	3,051	4,032	NA	2,405
Missouri	4,659	7,275	10,534	10,494	63,897	7,760
Montana	1,124	1,540	1,850	2,152	12,099	1,576
Nebraska	2,418	3,288	4,106	4,524	27,435	3,012
Nevada	1,975	2,632	2,517	3,184	22,448	2,671
New Hampshire	728	NA	1,270	1,317	NA	901
New Jersey	^R 18,072	^R 26,757	^R 34,181	^R 31,016	^R 193,349	^R 18,566
New Mexico	1,576	3,042	3,255	3,847	29,816	3,809
New York	NA	NA	NA	NA	NA	NA
North Carolina	2,972	4,856	7,698	6,545	38,899	4,516
North Dakota	1,069	1,191	1,541	NA	NA	NA
Ohio	15,017	22,401	28,924	30,984	NA	22,376
Oklahoma	2,895	3,866	5,725	5,179	38,315	3,488
Oregon	2,372	3,466	3,833	4,399	28,340	3,269
Pennsylvania	11,394	16,034	23,489	24,866	143,660	19,024
Rhode Island	1,321	1,539	2,137	2,037	11,838	1,019
South Carolina	1,644	2,047	3,190	2,948	20,602	2,409
South Dakota	716	1,344	1,367	1,617	9,578	1,228
Tennessee	3,885	4,643	8,850	10,255	53,012	5,515
Texas	14,437	16,026	21,581	27,066	187,948	19,076
Utah	1,990	3,890	3,901	4,611	30,361	4,901
Vermont	227	337	428	425	2,409	258
Virginia	5,279	6,571	9,058	9,381	59,723	7,458
Washington	NA	NA	NA	NA	NA	NA
West Virginia	2,192	3,372	3,862	3,907	NA	NA
Wisconsin	6,681	8,525	11,346	14,784	85,306	12,700
Wyoming	889	1,439	1,173	1,334	9,262	1,166
Total	^R265,510	^R369,984	^R437,792	^R469,378	^R3,098,190	^R360,454

See footnotes at end of table.

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1998-2000
(Million Cubic Feet) — Continued

State	1999					
	November	October	September	August	July	June
Alabama	2,598	2,176	1,711	1,635	1,626	1,628
Alaska	2,998	2,185	1,520	1,311	1,213	1,326
Arizona	2,220	1,910	1,809	1,683	1,846	2,155
Arkansas	NA	NA	NA	1,520	1,303	NA
California	18,795	15,657	16,411	20,556	17,100	17,228
Colorado	4,949	NA	2,616	NA	2,630	3,359
Connecticut	3,890	2,641	2,550	2,449	2,535	2,591
Delaware	388	305	179	159	182	215
District of Columbia	1,301	896	862	840	NA	940
Florida	2,920	2,344	2,413	2,257	2,280	2,785
Georgia	4,055	2,367	1,400	1,332	1,333	1,477
Hawaii	145	144	144	140	144	143
Idaho	1,029	676	459	420	425	520
Illinois	15,072	11,908	6,919	6,187	6,218	5,979
Indiana	NA	4,464	2,796	2,399	1,873	2,886
Iowa	3,271	2,575	1,626	1,246	1,520	1,406
Kansas	2,480	2,000	1,792	1,958	1,687	1,504
Kentucky	2,931	1,860	1,189	1,170	1,014	1,218
Louisiana	1,939	1,327	1,315	1,484	1,416	1,493
Maine	247	186	78	74	75	90
Maryland	4,901	3,672	2,663	2,495	2,557	2,710
Massachusetts	NA	NA	NA	NA	NA	4,936
Michigan	14,306	9,440	5,870	4,984	5,465	6,183
Minnesota	7,993	5,737	3,175	2,956	2,645	2,860
Mississippi	1,686	1,079	1,047	1,063	1,054	1,078
Missouri	3,964	2,805	2,423	2,080	3,128	2,471
Montana	1,101	733	426	346	423	492
Nebraska	1,787	1,156	1,067	772	1,074	1,123
Nevada	1,768	1,403	1,268	1,247	1,249	1,400
New Hampshire	616	384	221	204	212	221
New Jersey	^R 16,372	^R 10,159	^R 7,568	^R 6,778	^R 7,515	^R 8,034
New Mexico	2,380	1,648	1,399	1,295	1,149	1,302
New York	NA	NA	NA	NA	NA	NA
North Carolina	2,935	2,132	1,842	1,595	1,586	1,698
North Dakota	913	635	338	262	279	286
Ohio	14,754	9,003	4,789	NA	4,701	5,540
Oklahoma	2,622	2,100	1,552	1,677	1,697	938
Oregon	2,256	1,486	1,092	983	1,128	1,462
Pennsylvania	13,226	8,541	5,168	4,672	4,536	5,041
Rhode Island	1,309	651	454	334	501	526
South Carolina	1,676	1,251	1,144	1,073	1,127	1,109
South Dakota	736	522	301	267	313	438
Tennessee	3,988	3,225	2,562	2,265	2,287	2,573
Texas	15,141	11,359	11,568	12,805	12,486	12,020
Utah	2,725	1,873	1,257	902	1,090	989
Vermont	209	143	81	77	66	91
Virginia	5,005	3,541	2,617	2,671	2,613	2,584
Washington	NA	NA	NA	NA	NA	NA
West Virginia	2,474	1,960	1,239	1,359	1,235	1,346
Wisconsin	7,385	5,823	2,644	2,469	2,219	2,325
Wyoming	776	678	332	174	315	448
Total	^R257,583	^R188,072	^R140,320	^R140,292	^R138,336	^R142,990

See footnotes at end of table.

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1998-2000

(Million Cubic Feet) — Continued

State	1999					1998
	May	April	March	February	January	Total
Alabama	1,505	2,190	3,240	3,145	4,063	25,707
Alaska	1,759	1,962	3,009	3,088	3,318	27,079
Arizona	2,519	2,994	3,173	3,587	3,899	31,940
Arkansas	NA	2,508	3,392	3,510	5,524	28,063
California	21,902	22,672	29,559	28,130	32,605	284,885
Colorado	5,544	NA	7,598	8,919	11,360	63,145
Connecticut	3,204	3,724	5,831	6,038	6,594	42,410
Delaware	350	637	998	944	1,038	5,592
District of Columbia	1,249	1,976	2,334	2,549	2,486	16,866
Florida	2,793	3,408	3,962	3,747	4,038	37,743
Georgia	NA	2,968	5,657	5,897	7,205	55,431
Hawaii	143	147	142	158	153	1,747
Idaho	852	1,233	1,532	1,734	2,076	11,712
Illinois	8,316	14,051	24,495	26,217	35,555	174,747
Indiana	3,440	6,850	NA	^R 12,019	16,862	73,184
Iowa	1,762	3,777	6,196	6,154	8,881	43,028
Kansas	2,018	3,336	NA	NA	NA	41,788
Kentucky	1,690	2,570	5,149	4,979	6,499	32,468
Louisiana	1,625	2,087	2,520	2,729	3,691	24,049
Maine	122	199	357	341	454	2,456
Maryland	NA	5,678	NA	NA	9,013	57,432
Massachusetts	5,322	9,335	10,580	NA	6,662	90,099
Michigan	9,050	14,920	25,952	25,441	31,020	163,400
Minnesota	4,058	6,911	11,125	12,637	16,386	82,377
Mississippi	1,204	NA	2,676	2,196	NA	21,360
Missouri	3,258	5,235	8,535	9,736	12,503	62,000
Montana	902	1,153	1,308	1,542	2,096	12,961
Nebraska	1,609	2,308	3,484	4,246	5,797	28,911
Nevada	1,703	1,977	2,372	2,486	2,903	23,347
New Hampshire	NA	658	1,026	1,070	1,312	6,808
New Jersey	^R 10,431	^R 18,127	^R 27,801	^R 29,448	^R 32,552	146,654
New Mexico	2,306	2,404	3,324	3,748	5,051	27,395
New York	NA	NA	NA	NA	NA	335,800
North Carolina	2,221	3,583	5,572	4,826	6,392	36,427
North Dakota	623	909	1,253	1,558	2,083	10,085
Ohio	7,871	15,260	24,202	26,668	28,502	157,061
Oklahoma	2,265	3,813	4,620	5,679	7,865	43,910
Oregon	2,053	2,699	3,462	3,897	4,554	26,024
Pennsylvania	6,751	12,734	20,162	21,547	22,259	131,036
Rhode Island	650	1,085	1,731	1,686	1,892	11,482
South Carolina	1,343	1,725	2,552	2,236	2,957	19,829
South Dakota	493	914	1,149	1,343	1,873	9,265
Tennessee	2,601	4,448	6,378	6,629	10,540	52,406
Texas	12,790	15,844	17,651	19,696	27,511	169,613
Utah	1,858	2,920	3,068	4,198	4,580	31,091
Vermont	140	227	334	321	462	2,979
Virginia	3,250	5,242	7,620	8,070	9,051	58,318
Washington	NA	NA	NA	NA	NA	45,673
West Virginia	1,524	2,253	3,496	3,389	3,961	24,991
Wisconsin	3,362	6,980	11,437	11,592	16,370	81,375
Wyoming	844	941	1,070	1,166	1,352	10,423
Total	^R181,714	^R265,270	^R389,620	^R403,212	^R490,328	3,004,570

^R Revised Data.

NA Not Available.

Notes: Geographic coverage is the 50 States and the District of Columbia. Gas volumes delivered for use as vehicle fuel are included in the annual

total but not in the monthly components. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1998-2000

(Million Cubic Feet)

State	YTD 2000	YTD 1999	YTD 1998	2000		
				July	June	May
Alabama	119,297	118,148	119,426	15,230	16,075	17,293
Alaska	46,096	44,563	44,422	7,262	6,129	5,172
Arizona	14,088	16,182	16,076	2,240	2,122	2,183
Arkansas	92,270	NA	85,801	11,215	11,830	13,093
California	713,382	484,184	439,833	133,321	122,049	107,156
Colorado	NA	NA	53,750	NA	NA	NA
Connecticut	20,019	17,931	19,661	2,082	2,414	2,135
Delaware	16,023	12,163	9,513	1,691	2,072	2,315
District of Columbia	0	0	0	0	0	0
Florida	84,494	82,859	75,040	11,615	11,690	12,631
Georgia	NA	65,886	102,832	3,978	NA	3,869
Hawaii	318	260	0	46	46	47
Idaho ^a	19,148	20,128	20,913	2,357	2,532	2,656
Illinois	182,302	182,400	179,723	19,658	20,306	22,174
Indiana	185,773	NA	168,487	22,262	22,958	24,205
Iowa	58,990	62,037	61,680	6,782	7,808	7,124
Kansas	69,816	NA	65,087	12,270	10,660	9,466
Kentucky	55,853	54,426	54,999	6,438	6,704	6,870
Louisiana	598,124	562,311	528,859	82,213	78,026	87,937
Maine	NA	1,329	1,269	NA	NA	NA
Maryland	25,953	23,500	22,035	3,936	3,643	3,669
Massachusetts	NA	NA	73,014	NA	NA	NA
Michigan	188,725	171,308	178,306	19,381	21,784	25,697
Minnesota	60,087	62,660	61,419	6,447	9,876	4,967
Mississippi	NA	NA	46,997	5,243	5,311	6,240
Missouri	41,142	NA	39,866	5,023	5,373	5,155
Montana	13,128	14,445	12,556	1,210	1,498	1,460
Nebraska	25,338	24,417	33,480	5,701	3,569	2,766
Nevada	23,589	19,029	15,482	3,178	3,555	4,344
New Hampshire	NA	3,515	3,335	NA	NA	NA
New Jersey	118,285	118,256	122,486	15,445	^R 16,243	^R 17,237
New Mexico	16,404	NA	14,107	2,289	2,136	2,014
New York	NA	NA	160,972	25,917	26,934	27,880
North Carolina	70,461	66,429	63,562	8,298	8,644	9,567
North Dakota	9,061	11,566	12,451	578	1,960	1,010
Ohio	198,154	198,099	200,117	22,456	23,210	25,314
Oklahoma	87,020	102,842	115,020	12,240	14,692	11,224
Oregon	62,736	60,577	57,591	8,215	^R 8,263	8,195
Pennsylvania	NA	143,704	137,733	18,841	^R 19,655	NA
Rhode Island	17,868	21,089	24,364	1,969	1,782	2,170
South Carolina	59,609	58,244	59,223	7,562	7,262	8,814
South Dakota	3,145	2,941	3,302	561	497	341
Tennessee	NA	86,772	84,061	10,871	NA	10,777
Texas	NA	NA	1,127,811	NA	182,767	184,646
Utah	24,642	23,552	28,419	3,042	3,037	3,657
Vermont	2,255	1,598	1,254	321	331	303
Virginia	NA	54,833	51,027	8,866	8,988	7,353
Washington	NA	NA	75,136	NA	NA	NA
West Virginia	24,523	NA	30,316	3,069	3,290	3,498
Wisconsin	91,879	87,120	83,327	9,405	9,914	10,637
Wyoming	NA	18,847	33,630	2,459	NA	NA
Total	5,361,618	4,921,790	5,019,772	742,973	^R758,988	^R764,817

See footnotes at end of table.

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1998-2000

(Million Cubic Feet) — Continued

State	2000				1999	
	April	March	February	January	Total	December
Alabama	16,866	18,233	17,653	17,947	204,829	18,152
Alaska	6,766	7,192	6,390	7,185	74,491	6,917
Arizona	1,213	2,173	2,076	2,081	26,661	2,231
Arkansas	13,652	13,754	13,844	14,883	NA	15,108
California	82,233	86,700	86,174	95,749	947,700	78,551
Colorado	NA	NA	7,444	NA	NA	7,109
Connecticut	2,851	3,619	3,437	3,481	31,800	3,499
Delaware	2,561	2,675	2,254	2,455	21,336	2,324
District of Columbia	0	0	0	0	0	0
Florida	12,521	12,666	11,187	12,183	142,104	11,513
Georgia	3,678	4,028	4,494	4,600	91,150	4,252
Hawaii	44	46	45	44	463	42
Idaho ^a	2,681	2,904	2,883	3,135	33,831	3,033
Illinois	24,982	29,119	31,511	34,552	309,467	31,510
Indiana	25,123	28,207	29,449	33,569	NA	30,100
Iowa	8,386	8,914	9,865	10,110	^R 102,333	8,319
Kansas	8,715	9,141	9,069	10,494	NA	8,872
Kentucky	8,372	8,359	9,248	9,863	92,683	8,792
Louisiana	82,322	87,213	85,238	95,174	969,981	87,508
Maine	335	315	356	327	2,521	281
Maryland	3,533	3,956	3,448	^R 3,767	40,980	3,803
Massachusetts	NA	NA	NA	NA	NA	NA
Michigan	28,316	31,364	30,858	31,324	285,977	28,881
Minnesota	8,500	8,894	10,977	10,425	NA	NA
Mississippi	NA	7,193	6,812	6,248	NA	7,625
Missouri	5,468	6,620	6,938	6,565	NA	7,471
Montana	2,040	2,223	2,555	2,142	23,091	2,327
Nebraska	3,148	3,343	^R 3,438	^R 3,373	40,990	2,542
Nevada	3,906	2,904	2,878	2,824	33,250	3,204
New Hampshire	446	NA	421	453	^R 5,823	413
New Jersey	^R 16,281	^R 16,889	^R 18,009	^R 18,181	^R 201,126	^R 16,900
New Mexico	3,173	2,701	1,929	2,161	NA	3,469
New York	NA	NA	28,916	24,539	NA	25,997
North Carolina	9,329	11,298	10,971	12,354	115,427	11,492
North Dakota	1,918	1,242	1,186	1,169	NA	NA
Ohio	28,145	30,732	32,879	35,417	NA	31,330
Oklahoma	11,736	11,505	12,730	12,894	172,363	13,782
Oregon	9,181	9,176	9,451	10,256	108,081	10,604
Pennsylvania	22,194	25,628	25,178	24,411	242,580	22,035
Rhode Island	2,579	2,490	3,105	3,774	^R 34,811	3,447
South Carolina	9,128	9,720	8,630	8,493	101,777	9,401
South Dakota	391	410	474	471	5,036	442
Tennessee	11,641	11,373	^R 12,515	11,982	^R 148,433	^R 11,685
Texas	174,529	136,980	164,715	121,072	NA	208,335
Utah	3,614	3,861	3,661	3,771	40,988	3,853
Vermont	353	350	357	240	2,819	327
Virginia	NA	7,136	9,755	7,257	95,232	9,027
Washington	NA	NA	NA	NA	NA	NA
West Virginia	3,484	2,884	4,016	4,282	NA	NA
Wisconsin	13,077	14,675	16,048	18,124	147,543	15,331
Wyoming	4,899	4,339	5,520	4,769	34,573	3,052
Total	^R759,866	^R761,460	^R791,631	^R781,884	^R8,759,956	^R821,851

See footnotes at end of table.

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1998-2000

(Million Cubic Feet) — Continued

State	1999					
	November	October	September	August	July	June
Alabama	17,655	17,404	16,497	16,973	16,525	15,938
Alaska	6,876	6,613	4,738	4,784	6,932	5,923
Arizona	1,903	1,910	2,160	2,276	2,402	1,956
Arkansas	12,718	13,130	12,362	12,415	10,987	NA
California	87,915	104,100	98,766	94,185	82,007	68,105
Colorado	7,020	5,262	5,761	5,730	NA	5,605
Connecticut	3,143	2,637	2,283	2,308	2,221	2,055
Delaware	1,787	1,878	1,798	1,385	1,431	1,459
District of Columbia	0	0	0	0	0	0
Florida	11,472	12,236	11,153	12,870	12,478	11,739
Georgia	5,497	5,059	6,271	4,185	5,511	7,177
Hawaii	42	39	39	41	40	43
Idaho ^a	2,821	2,941	2,735	2,173	2,450	2,528
Illinois	26,906	24,758	22,294	21,598	21,500	21,056
Indiana	25,974	24,586	23,198	22,844	22,039	21,508
Iowa	8,799	8,267	7,486	7,425	7,195	6,980
Kansas	6,513	5,881	8,069	10,994	9,275	7,751
Kentucky	8,290	7,899	6,954	6,321	6,402	6,535
Louisiana	82,412	83,388	75,786	78,575	80,375	80,334
Maine	219	279	203	210	191	184
Maryland	3,491	3,333	3,328	3,525	3,338	2,887
Massachusetts	NA	NA	NA	9,414	NA	NA
Michigan	26,811	21,628	19,077	18,271	19,911	20,416
Minnesota	8,081	7,735	7,064	9,164	7,598	7,397
Mississippi	7,206	6,962	6,310	6,287	6,669	6,807
Missouri	6,425	4,991	4,689	4,815	4,751	4,801
Montana	2,039	1,649	1,305	1,326	1,293	1,694
Nebraska	2,490	3,600	3,992	3,949	5,432	2,700
Nevada	2,651	2,826	2,795	2,745	2,504	2,573
New Hampshire	376	571	471	478	442	457
New Jersey	^R 16,385	^R 16,700	^R 16,463	^R 16,422	^R 16,026	^R 15,299
New Mexico	3,257	NA	NA	NA	3,371	3,279
New York	26,228	22,097	22,229	NA	NA	NA
North Carolina	10,003	8,709	8,712	10,082	9,288	8,970
North Dakota	1,424	1,201	1,295	1,130	1,155	1,266
Ohio	28,638	27,088	24,938	NA	23,427	23,595
Oklahoma	13,524	12,642	15,620	13,952	14,254	15,192
Oregon	10,619	9,406	8,301	8,574	8,008	7,861
Pennsylvania	20,585	19,248	18,426	18,582	17,497	17,687
Rhode Island	2,922	2,322	2,535	2,496	^R 2,923	2,948
South Carolina	9,184	9,005	7,996	7,948	7,342	7,708
South Dakota	445	466	305	437	419	282
Tennessee	11,852	12,971	13,416	11,737	12,826	11,262
Texas	187,716	181,949	205,554	179,634	133,268	142,830
Utah	3,628	3,582	3,192	3,180	3,200	2,351
Vermont	273	261	183	176	174	157
Virginia	5,865	6,033	8,336	11,139	10,441	8,708
Washington	NA	NA	NA	NA	NA	NA
West Virginia	3,587	3,458	3,220	3,367	3,135	NA
Wisconsin	12,721	12,469	10,307	9,595	9,235	9,243
Wyoming	3,603	2,580	3,945	2,546	2,697	2,051
Total	^R770,779	^R758,767	^R755,114	^R731,656	^R667,932	^R657,627

See footnotes at end of table.

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1998-2000

(Million Cubic Feet) — Continued

State	1999					1998
	May	April	March	February	January	Total
Alabama	15,947	17,042	19,174	16,360	17,161	200,305
Alaska	6,318	6,244	6,717	5,805	6,626	75,947
Arizona	2,390	2,545	2,237	2,291	2,360	28,157
Arkansas	11,429	11,732	12,582	11,561	13,069	147,313
California	72,765	61,776	57,968	71,293	70,270	827,401
Colorado	6,202	7,672	6,272	6,951	4,630	87,238
Connecticut	2,419	2,504	2,790	2,957	2,985	32,498
Delaware	1,789	1,767	1,952	1,878	1,887	16,287
District of Columbia	0	0	0	0	0	0
Florida	11,827	12,512	12,603	10,480	11,219	126,891
Georgia	7,106	7,479	13,140	12,545	12,929	164,501
Hawaii	35	38	39	33	32	373
Idaho ^a	2,885	3,167	3,214	3,081	2,802	34,303
Illinois	21,281	25,516	29,721	29,436	33,890	303,668
Indiana	NA	NA	NA	26,942	NA	290,973
Iowa	8,326	^R 8,577	9,569	9,554	11,836	105,950
Kansas	NA	8,130	8,482	7,588	NA	111,143
Kentucky	7,087	7,610	9,289	8,179	9,326	93,217
Louisiana	81,391	79,477	82,222	73,872	84,638	922,155
Maine	207	161	189	104	293	2,297
Maryland	3,183	3,243	4,506	3,261	3,083	38,531
Massachusetts	8,740	NA	NA	8,643	8,763	125,286
Michigan	22,851	24,820	28,068	26,451	28,793	282,036
Minnesota	7,457	8,485	9,697	11,186	10,841	104,610
Mississippi	7,007	NA	7,375	6,541	NA	78,640
Missouri	4,615	5,395	5,127	NA	6,562	64,868
Montana	1,968	2,120	2,174	2,554	2,642	21,416
Nebraska	2,565	3,051	3,098	3,330	4,240	53,053
Nevada	2,811	2,635	2,816	2,674	3,016	28,662
New Hampshire	^R 523	578	505	484	526	5,878
New Jersey	^R 15,936	^R 17,287	^R 17,465	^R 17,695	^R 18,547	204,791
New Mexico	3,606	NA	3,355	3,047	NA	25,048
New York	NA	NA	NA	NA	NA	251,591
North Carolina	8,857	8,867	10,885	9,561	10,001	106,497
North Dakota	1,351	1,479	2,037	2,844	1,434	20,606
Ohio	25,248	28,808	32,257	31,603	33,159	332,955
Oklahoma	13,847	16,094	14,338	14,323	14,794	198,110
Oregon	8,216	8,923	9,571	8,595	9,403	102,770
Pennsylvania	18,565	20,802	23,245	23,747	22,161	231,362
Rhode Island	3,343	2,996	2,528	2,930	3,421	42,278
South Carolina	8,102	8,438	9,614	8,225	8,813	102,324
South Dakota	347	446	439	463	545	5,607
Tennessee	12,000	11,647	12,570	12,922	13,545	145,773
Texas	NA	136,782	144,116	159,127	162,750	2,023,278
Utah	3,422	3,809	3,718	3,350	3,703	45,501
Vermont	192	243	301	312	220	2,105
Virginia	7,843	8,449	7,524	6,431	5,437	92,801
Washington	NA	NA	NA	NA	NA	133,106
West Virginia	3,225	NA	NA	3,460	3,865	49,807
Wisconsin	10,081	12,061	14,729	14,428	17,342	141,980
Wyoming	2,069	2,718	3,036	2,967	3,310	54,259
Total	^R688,106	^R682,124	^R726,303	^R728,844	^R770,854	8,686,147

^a Small volumes of natural gas representing onsystem sales to industrial consumers in Idaho are included in the annual total but not in monthly components.

^R Revised Data.

NA Not Available.

Notes: Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 18. Natural Gas Deliveries to Electric Utility^a Consumers, by State, 1998-2000
(Million Cubic Feet)

State	YTD 2000	YTD 1999	YTD 1998	2000		
				July	June	May
Alabama	17,395	11,251	13,874	6,270	4,342	3,697
Alaska	20,081	17,193	16,528	2,806	2,707	2,834
Arizona	40,744	26,486	13,058	11,503	8,942	6,878
Arkansas	23,659	23,373	23,395	4,640	3,984	3,892
California	68,250	93,818	141,538	15,331	13,769	9,891
Colorado	16,626	10,784	5,182	3,724	2,826	2,685
Connecticut	4,185	6,357	6,100	598	598	598
Delaware	4,275	12,828	5,095	17	1,127	1,304
District of Columbia	0	0	0	0	0	0
Florida	199,832	169,301	160,530	32,241	28,450	31,538
Georgia	13,614	10,769	12,656	6,027	3,623	3,438
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	2,214	30,763	38,224	728	374	506
Indiana	2,697	5,556	5,646	696	240	480
Iowa	2,470	3,270	3,331	619	321	571
Kansas	16,881	23,007	18,347	5,948	2,143	2,691
Kentucky	2,395	3,296	3,229	307	416	765
Louisiana	167,753	189,565	173,565	34,832	29,545	28,267
Maine	0	0	0	0	0	0
Maryland	12,730	10,376	5,672	2,149	4,184	2,596
Massachusetts	2,153	5,772	12,915	298	364	475
Michigan	24,773	32,686	26,839	2,636	4,174	4,703
Minnesota	2,936	5,005	3,847	830	645	461
Mississippi	58,963	58,460	44,413	11,426	9,800	10,438
Missouri	15,142	11,358	7,707	4,512	2,472	2,881
Montana	97	222	251	32	19	8
Nebraska	2,314	3,287	2,633	910	470	462
Nevada	39,481	35,789	29,917	7,704	7,460	5,828
New Hampshire	780	157	98	0	0	2
New Jersey	14,077	19,789	19,362	2,686	4,151	3,324
New Mexico	24,191	19,631	22,572	4,568	3,211	3,542
New York	65,758	115,633	118,784	13,136	11,296	10,594
North Carolina	6,135	6,195	6,970	1,827	2,500	1,607
North Dakota	0	0	0	0	0	0
Ohio	4,360	8,071	4,112	605	628	1,144
Oklahoma	93,783	100,908	90,134	22,195	14,792	16,320
Oregon	18,757	8,269	10,189	4,787	3,057	1,641
Pennsylvania	1,895	6,756	5,199	213	262	285
Rhode Island	0	0	13,339	0	0	0
South Carolina	1,983	2,950	3,525	548	719	571
South Dakota	1,374	1,835	1,452	566	420	209
Tennessee	1,567	2,003	3,041	414	235	484
Texas	732,488	687,051	709,490	155,147	124,051	134,690
Utah	5,482	3,263	2,111	1,172	1,344	908
Vermont	490	19	154	130	167	88
Virginia	12,056	15,719	10,601	1,832	1,681	1,923
Washington	10,421	1,233	1,438	3,991	3,662	2,290
West Virginia	205	220	230	26	61	14
Wisconsin	7,018	9,698	10,162	1,219	669	1,754
Wyoming	726	122	238	317	355	14
Total	1,765,206	1,810,092	1,807,694	372,162	306,255	309,290

See footnotes at end of table.

Table 18. Natural Gas Deliveries to Electric Utility^a Consumers, by State, 1998-2000
(Million Cubic Feet) — Continued

State	2000				1999	
	April	March	February	January	Total	December
Alabama	1,398	237	434	1,017	20,897	674
Alaska	2,681	2,904	2,782	3,367	30,554	3,390
Arizona	3,960	2,670	3,126	3,665	50,876	3,284
Arkansas	3,253	3,810	3,374	706	40,059	1,981
California	5,470	8,102	7,506	8,180	144,796	7,169
Colorado	1,176	2,021	2,227	1,968	19,149	1,165
Connecticut	598	598	597	597	13,086	547
Delaware	485	315	381	646	19,873	498
District of Columbia	0	0	0	0	0	0
Florida	27,815	29,230	24,232	26,327	319,351	24,990
Georgia	240	153	67	65	20,507	174
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	229	82	78	218	40,700	828
Indiana	298	158	310	514	7,648	245
Iowa	236	215	232	275	5,245	241
Kansas	2,052	1,150	1,465	1,432	35,857	1,050
Kentucky	116	107	161	523	5,585	223
Louisiana	19,328	20,829	14,276	20,676	320,367	17,337
Maine	0	0	0	0	0	0
Maryland	1,963	1,062	259	517	16,382	409
Massachusetts	455	304	160	98	8,136	107
Michigan	3,213	2,554	3,418	4,073	51,136	3,070
Minnesota	280	209	190	320	6,590	149
Mississippi	6,023	5,942	6,190	9,144	101,613	8,922
Missouri	1,515	1,045	1,232	1,484	19,400	580
Montana	0	8	5	25	289	10
Nebraska	175	73	113	111	4,548	49
Nevada	4,780	4,700	3,848	5,162	65,131	6,052
New Hampshire	187	413	57	121	572	134
New Jersey	1,969	963	533	450	32,615	1,066
New Mexico	3,381	3,539	3,027	2,923	35,594	2,683
New York	9,049	9,157	6,938	5,589	181,817	9,010
North Carolina	27	37	54	83	10,562	17
North Dakota	0	0	0	0	0	0
Ohio	610	667	253	454	11,097	425
Oklahoma	14,108	10,675	6,783	8,911	169,826	9,305
Oregon	562	2,610	2,942	3,157	23,309	2,385
Pennsylvania	270	268	221	375	10,363	428
Rhode Island	0	0	0	0	0	0
South Carolina	68	27	15	35	5,107	48
South Dakota	27	56	15	82	2,526	94
Tennessee	9	18	117	291	3,453	29
Texas	92,994	86,800	65,922	72,884	1,207,294	64,468
Utah	712	645	327	375	6,481	524
Vermont	62	14	23	5	249	3
Virginia	1,497	1,947	1,327	1,850	23,459	1,106
Washington	80	1	69	329	6,700	258
West Virginia	24	33	32	15	386	42
Wisconsin	837	707	1,088	743	14,068	688
Wyoming	6	9	13	11	167	15
Total	214,217	207,068	166,419	189,794	3,113,420	175,870

See footnotes at end of table.

Table 18. Natural Gas Deliveries to Electric Utility^a Consumers, by State, 1998-2000
(Million Cubic Feet) — Continued

State	1999					
	November	October	September	August	July	June
Alabama	889	557	1,865	5,662	4,716	1,941
Alaska	2,841	2,634	2,217	2,278	2,547	2,202
Arizona	3,338	6,403	4,701	6,665	6,135	5,297
Arkansas	2,043	1,589	3,113	7,960	7,124	5,631
California	7,498	14,585	9,518	12,208	11,705	9,170
Colorado	1,110	1,823	934	3,333	2,527	2,119
Connecticut	1,161	1,321	1,661	2,038	3,003	1,802
Delaware	337	1,352	1,570	3,289	3,803	2,537
District of Columbia	0	0	0	0	0	0
Florida	25,442	30,918	34,373	34,327	33,908	29,623
Georgia	456	692	1,933	6,483	4,350	1,726
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	1,837	1,617	1,740	3,915	11,009	4,861
Indiana	157	142	312	1,236	2,685	1,194
Iowa	313	304	429	688	1,546	618
Kansas	737	1,127	1,948	7,989	8,412	3,498
Kentucky	262	188	463	1,153	1,807	481
Louisiana	16,697	21,366	32,452	42,949	38,341	34,799
Maine	0	0	0	0	0	0
Maryland	346	1,338	1,101	2,813	5,838	1,817
Massachusetts	396	359	816	685	1,487	1,621
Michigan	3,199	3,869	3,701	4,611	7,577	5,195
Minnesota	253	106	208	868	2,070	788
Mississippi	5,720	6,731	7,527	14,254	14,103	9,852
Missouri	451	520	1,147	5,344	5,739	1,992
Montana	14	7	8	28	112	32
Nebraska	101	134	235	741	1,836	724
Nevada	4,562	5,621	6,449	6,658	6,822	5,845
New Hampshire	22	0	161	98	67	25
New Jersey	1,105	1,280	3,190	6,185	11,542	3,447
New Mexico	2,186	3,056	3,403	4,635	3,947	2,732
New York	11,261	11,999	14,135	19,779	26,273	22,550
North Carolina	50	104	625	3,571	4,266	1,238
North Dakota	0	0	0	0	0	0
Ohio	179	345	541	1,535	3,240	1,435
Oklahoma	8,187	10,785	13,928	26,713	24,843	18,378
Oregon	2,968	4,558	3,119	2,010	1,574	878
Pennsylvania	265	454	567	1,894	3,243	2,077
Rhode Island	0	0	0	0	0	0
South Carolina	77	17	165	1,851	2,291	390
South Dakota	23	69	79	425	646	214
Tennessee	32	0	174	1,214	1,208	596
Texas	63,476	96,700	117,677	177,923	152,635	127,708
Utah	398	1,121	495	680	754	691
Vermont	3	1	91	133	0	2
Virginia	928	651	1,701	3,354	4,064	1,888
Washington	468	3,032	1,276	434	51	39
West Virginia	37	46	23	17	25	32
Wisconsin	572	475	862	1,775	4,036	1,896
Wyoming	10	8	7	5	8	68
Total	172,408	240,002	282,642	432,405	433,914	321,646

See footnotes at end of table.

Table 18. Natural Gas Deliveries to Electric Utility^a Consumers, by State, 1998-2000
(Million Cubic Feet) — Continued

State	1999					1998
	May	April	March	February	January	Total
Alabama	1,293	1,252	929	556	564	25,546
Alaska	2,307	2,300	2,522	2,556	2,758	28,784
Arizona	4,293	4,500	2,023	1,801	2,436	38,674
Arkansas	4,008	2,597	2,050	1,395	569	40,576
California	8,655	15,421	16,765	15,698	16,405	271,154
Colorado	1,792	1,916	886	651	894	10,627
Connecticut	1,315	84	124	1	29	10,719
Delaware	2,058	676	1,696	921	1,137	11,135
District of Columbia	0	0	0	0	0	0
Florida	29,642	28,322	19,054	13,254	15,499	281,346
Georgia	1,378	3,057	221	20	16	22,371
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	2,699	5,379	2,941	1,385	2,489	56,337
Indiana	249	411	339	151	528	9,096
Iowa	266	334	181	187	139	5,947
Kansas	2,767	3,697	2,426	1,037	1,171	36,896
Kentucky	201	188	131	81	406	5,760
Louisiana	29,657	25,383	21,890	17,767	21,728	318,395
Maine	0	0	0	0	0	0
Maryland	475	1,376	288	138	443	12,303
Massachusetts	1,430	697	381	47	110	18,427
Michigan	5,214	4,049	3,896	3,090	3,664	48,321
Minnesota	712	475	477	164	319	7,738
Mississippi	9,543	10,120	4,324	4,733	5,785	76,362
Missouri	637	1,675	327	365	624	16,035
Montana	6	9	4	5	54	522
Nebraska	195	335	115	43	39	5,044
Nevada	5,660	4,830	4,294	3,737	4,601	60,937
New Hampshire	16	0	16	0	32	149
New Jersey	2,078	660	689	347	1,027	30,996
New Mexico	2,037	3,133	2,829	2,357	2,596	39,034
New York	23,208	14,150	12,883	8,483	8,087	208,348
North Carolina	147	474	28	4	38	12,418
North Dakota	0	0	0	0	0	0
Ohio	712	1,118	941	324	302	7,663
Oklahoma	13,892	13,164	12,488	7,557	10,585	174,577
Oregon	2,038	1,073	220	945	1,540	28,883
Pennsylvania	467	285	317	106	262	6,890
Rhode Island	0	0	0	0	0	15,589
South Carolina	76	109	49	21	14	5,893
South Dakota	215	280	233	122	125	2,865
Tennessee	58	142	0	0	0	6,213
Texas	104,517	97,360	81,945	56,206	66,680	1,242,574
Utah	192	395	454	392	384	5,945
Vermont	1	2	6	2	5	188
Virginia	2,235	1,818	2,103	1,937	1,674	20,386
Washington	562	505	6	41	29	13,352
West Virginia	48	29	35	24	27	417
Wisconsin	1,434	555	570	654	553	16,348
Wyoming	6	4	13	14	9	271
Total	270,394	254,337	204,107	149,319	176,375	3,258,054

^a Includes all steam electric utility generating plants with a combined capacity of 50 megawatts or greater.

Notes: Geographic coverage is the 50 States and the District of Columbia.

See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-759, "Monthly Power Plant Report."

Table 19. Natural Gas Deliveries to All Consumers, by State, 1998-2000

(Million Cubic Feet)

State	YTD 2000	YTD 1999	YTD 1998	2000		
				July	June	May
Alabama	183,757	177,412	187,438	23,816	22,970	24,728
Alaska	87,566	87,698	85,400	11,579	10,325	10,346
Arizona	97,736	86,206	76,274	16,784	14,452	12,984
Arkansas	NA	NA	156,514	NA	NA	NA
California	1,240,560	1,142,290	1,104,690	189,357	178,742	165,873
Colorado	NA	NA	179,309	NA	NA	NA
Connecticut	82,009	81,575	77,353	6,092	6,554	8,318
Delaware	30,666	35,898	24,240	2,150	3,722	4,628
District of Columbia	21,784	NA	21,094	1,256	1,455	2,064
Florida	323,752	284,074	269,434	48,098	44,555	49,065
Georgia	NA	NA	225,880	15,229	NA	13,847
Hawaii	1,689	1,609	1,357	235	242	243
Idaho	39,035	40,672	39,352	3,239	3,698	4,220
Illinois	569,058	618,970	587,424	36,231	39,109	46,610
Indiana	NA	NA	315,472	NA	NA	34,567
Iowa	132,837	143,747	139,127	10,395	11,057	12,914
Kansas	177,590	NA	163,270	23,933	18,624	19,666
Kentucky	117,541	118,951	114,710	8,912	9,432	10,588
Louisiana	NA	797,565	753,326	NA	110,714	119,684
Maine	NA	3,559	3,393	NA	NA	NA
Maryland	129,394	NA	110,210	10,233	12,858	13,329
Massachusetts	NA	NA	221,353	NA	NA	NA
Michigan	563,145	561,777	530,066	35,088	42,393	58,915
Minnesota	NA	200,993	184,859	13,097	16,824	14,425
Mississippi	133,905	NA	124,021	18,375	16,907	19,121
Missouri	167,338	NA	171,022	14,142	12,329	15,968
Montana	33,290	35,086	32,752	2,190	2,655	3,188
Nebraska	73,312	75,871	85,632	8,471	6,341	6,189
Nevada	97,343	88,306	80,964	13,678	13,828	13,512
New Hampshire	NA	13,212	12,351	NA	NA	NA
New Jersey	409,340	409,680	370,842	33,992	^R 34,803	^R 38,646
New Mexico	77,759	NA	76,280	9,131	8,958	8,611
New York	NA	NA	726,556	NA	NA	NA
North Carolina	145,653	137,039	133,325	12,682	14,554	15,365
North Dakota	NA	25,868	25,704	1,065	2,651	2,029
Ohio	528,141	532,672	501,410	35,633	37,221	48,858
Oklahoma	244,273	276,316	285,970	37,638	32,554	32,227
Oregon	125,643	114,380	107,076	15,085	^R 14,273	14,034
Pennsylvania	NA	408,298	374,219	NA	^R 36,098	NA
Rhode Island	43,464	41,265	57,167	2,899	3,045	4,187
South Carolina	94,048	92,377	95,264	9,715	9,724	11,881
South Dakota	18,206	19,387	18,716	1,661	1,585	1,651
Tennessee	NA	NA	165,643	14,429	NA	16,319
Texas	NA	NA	2,077,398	NA	324,741	342,851
Utah	77,570	78,720	82,848	6,659	6,827	7,611
Vermont	6,503	5,094	5,001	602	710	732
Virginia	160,201	NA	142,675	15,315	15,909	16,187
Washington	NA	NA	150,858	NA	NA	NA
West Virginia	NA	NA	66,673	4,785	5,403	7,174
Wisconsin	227,204	231,509	217,483	15,500	15,635	21,085
Wyoming	NA	33,148	48,905	NA	NA	NA
Total	12,335,266	11,933,910	11,808,302	1,412,449	^R1,386,768	^R1,505,430

See footnotes at end of table.

Table 19. Natural Gas Deliveries to All Consumers, by State, 1998-2000

(Million Cubic Feet) — Continued

State	2000				1999	
	April	March	February	January	Total	December
Alabama	23,644	25,649	31,734	31,217	298,206	28,079
Alaska	12,369	14,102	13,127	15,718	149,801	16,205
Arizona	10,865	12,768	13,235	16,648	141,607	13,605
Arkansas	19,802	NA	NA	NA	NA	22,911
California	145,827	181,275	182,440	197,045	1,923,533	173,447
Colorado	24,248	NA	NA	NA	NA	31,107
Connecticut	10,447	14,836	18,799	16,965	130,237	14,109
Delaware	4,533	4,621	5,170	5,842	56,083	4,570
District of Columbia	2,948	3,735	5,287	5,038	NA	1,733
Florida	45,716	48,108	42,595	45,615	511,289	41,390
Georgia	15,798	19,232	28,697	40,252	NA	32,210
Hawaii	235	245	243	246	2,735	230
Idaho	5,464	6,600	7,207	8,608	64,325	7,210
Illinois	76,010	94,271	122,950	153,877	983,082	132,729
Indiana	44,692	53,163	68,535	NA	NA	NA
Iowa	17,350	21,220	27,333	32,569	^R 223,933	25,609
Kansas	22,418	26,001	31,543	35,405	NA	24,168
Kentucky	15,191	18,467	24,107	30,843	193,556	25,247
Louisiana	107,164	114,319	109,933	127,055	1,358,597	112,640
Maine	529	NA	830	1,052	6,057	785
Maryland	16,931	20,295	26,406	^R 29,341	NA	21,892
Massachusetts	29,022	NA	NA	NA	NA	NA
Michigan	80,247	97,752	119,744	129,006	861,809	101,989
Minnesota	26,009	31,609	NA	NA	NA	NA
Mississippi	16,467	17,505	20,985	24,545	NA	22,113
Missouri	20,823	27,777	36,598	39,700	NA	30,372
Montana	4,678	6,002	7,139	7,438	55,162	6,754
Nebraska	10,256	12,440	^R 14,385	^R 15,230	113,385	10,721
Nevada	12,688	13,948	13,104	16,586	149,754	16,347
New Hampshire	2,002	NA	3,022	3,120	^R 20,223	2,231
New Jersey	^R 54,005	^R 69,783	^R 90,483	^R 87,626	^R 622,291	^R 57,897
New Mexico	11,568	12,729	12,649	14,114	NA	16,265
New York	110,986	NA	NA	NA	NA	NA
North Carolina	16,859	23,876	32,119	30,199	217,957	22,958
North Dakota	3,916	3,756	4,425	NA	39,294	4,110
Ohio	71,664	91,255	114,573	128,938	NA	100,712
Oklahoma	33,932	33,217	36,714	37,991	442,527	34,102
Oregon	15,608	20,283	21,905	24,455	197,703	21,566
Pennsylvania	55,460	71,739	92,261	97,807	637,358	75,493
Rhode Island	5,712	6,611	12,341	8,668	^R 63,250	6,202
South Carolina	12,757	14,670	18,272	17,028	153,194	15,663
South Dakota	2,192	3,170	3,628	4,319	28,906	3,393
Tennessee	20,160	22,522	^R 33,997	36,923	NA	^R 23,842
Texas	296,210	257,093	283,560	277,915	NA	313,454
Utah	9,283	15,188	14,926	17,075	133,303	18,893
Vermont	909	1,097	1,319	1,134	8,062	885
Virginia	21,363	24,173	33,919	33,334	NA	28,154
Washington	21,104	NA	NA	NA	NA	NA
West Virginia	8,196	NA	14,226	13,523	NA	NA
Wisconsin	31,778	36,991	47,126	59,090	374,826	50,507
Wyoming	7,021	7,227	8,372	7,775	55,928	5,758
Total	^R1,635,055	^R1,889,766	^R2,172,826	^R2,332,972	^R19,686,918	^R2,021,363

See footnotes at end of table.

Table 19. Natural Gas Deliveries to All Consumers, by State, 1998-2000

(Million Cubic Feet) — Continued

State	1999					
	November	October	September	August	July	June
Alabama	24,279	21,731	21,285	25,421	24,153	20,894
Alaska	14,842	12,855	9,345	8,854	11,178	10,011
Arizona	9,143	11,388	9,676	11,588	11,449	10,760
Arkansas	NA	NA	NA	22,846	20,412	NA
California	148,687	159,602	149,187	150,320	136,534	127,455
Colorado	21,407	NA	12,346	NA	NA	15,851
Connecticut	11,239	8,112	7,554	7,648	8,818	7,689
Delaware	3,087	3,812	3,716	5,000	5,617	4,465
District of Columbia	2,329	1,379	1,187	1,155	NA	1,339
Florida	40,778	46,237	48,648	50,162	49,425	44,949
Georgia	21,975	15,446	13,690	14,389	13,440	11,904
Hawaii	223	228	224	222	229	229
Idaho	5,377	4,484	3,630	2,952	3,303	3,694
Illinois	82,376	64,712	43,502	40,793	48,698	43,024
Indiana	NA	36,490	29,555	29,254	29,408	29,055
Iowa	17,995	14,615	11,374	10,591	12,087	10,601
Kansas	13,962	11,815	13,381	22,637	20,930	14,923
Kentucky	16,939	12,576	10,009	9,834	10,397	9,569
Louisiana	104,298	108,150	111,287	124,657	121,893	118,535
Maine	561	535	309	309	288	301
Maryland	14,979	11,868	9,043	10,565	NA	9,585
Massachusetts	NA	NA	NA	NA	NA	NA
Michigan	73,980	53,279	36,486	34,299	39,861	42,207
Minnesota	NA	20,691	13,815	15,510	14,556	14,147
Mississippi	16,261	15,655	15,601	22,294	22,610	18,549
Missouri	17,734	12,497	11,007	14,536	16,175	12,353
Montana	5,137	3,731	2,376	2,079	2,345	2,864
Nebraska	7,106	7,021	6,086	6,580	9,346	5,728
Nevada	10,990	11,065	11,470	11,576	11,520	11,058
New Hampshire	1,578	1,266	1,014	922	874	898
New Jersey	^R 50,799	^R 37,765	^R 32,290	^R 33,860	^R 39,781	^R 32,609
New Mexico	11,930	NA	NA	NA	9,422	8,436
New York	NA	NA	NA	NA	NA	NA
North Carolina	16,942	12,629	12,217	16,172	16,258	13,223
North Dakota	3,297	2,498	1,933	1,588	1,666	1,818
Ohio	71,301	53,756	37,133	NA	37,991	38,542
Oklahoma	27,964	27,746	32,614	43,786	42,452	36,431
Oregon	18,904	17,042	13,433	12,378	11,548	11,835
Pennsylvania	53,853	39,823	29,936	29,955	30,388	31,323
Rhode Island	5,458	3,664	3,433	3,229	^R 3,871	4,031
South Carolina	13,032	11,009	9,794	11,320	11,252	9,777
South Dakota	2,122	1,663	986	1,353	1,652	1,258
Tennessee	20,129	18,132	17,678	16,378	17,386	15,853
Texas	277,143	296,865	340,648	375,662	304,371	289,287
Utah	12,072	10,142	7,230	6,246	7,298	5,678
Vermont	698	529	413	442	295	327
Virginia	17,505	13,153	14,141	18,568	18,642	NA
Washington	NA	NA	NA	NA	NA	NA
West Virginia	8,450	NA	5,170	NA	4,928	NA
Wisconsin	32,141	26,755	17,255	16,660	18,166	16,736
Wyoming	5,267	4,012	4,792	2,951	3,330	3,064
Total	^R1,574,623	^R1,420,681	^R1,314,947	^R1,421,393	^R1,367,843	^R1,276,459

See footnotes at end of table.

Table 19. Natural Gas Deliveries to All Consumers, by State, 1998-2000

(Million Cubic Feet) — Continued

State	1999					1998
	May	April	March	February	January	Total
Alabama	20,659	24,462	29,878	26,359	31,006	298,102
Alaska	11,323	11,821	14,323	13,673	15,371	147,426
Arizona	11,311	13,358	11,127	13,094	15,106	134,871
Arkansas	NA	20,569	23,181	21,726	28,211	254,142
California	143,918	161,981	171,695	193,094	207,614	1,933,371
Colorado	23,300	NA	28,491	31,988	38,184	271,849
Connecticut	8,817	9,936	14,525	15,078	16,712	120,955
Delaware	4,694	4,068	6,220	5,212	5,622	40,769
District of Columbia	1,936	3,245	4,658	4,857	5,400	30,115
Florida	45,104	45,459	37,270	28,980	32,887	460,082
Georgia	NA	18,441	30,256	32,026	37,187	349,701
Hawaii	222	231	226	238	233	2,654
Idaho	4,982	6,275	7,004	7,448	7,967	62,018
Illinois	48,170	76,211	118,600	118,504	165,762	944,563
Indiana	NA	NA	NA	^R 62,076	NA	513,375
Iowa	13,436	^R 18,232	25,806	26,549	37,036	223,826
Kansas	NA	21,446	NA	NA	NA	260,044
Kentucky	10,783	14,482	23,836	22,020	27,863	186,990
Louisiana	114,938	110,702	112,082	100,239	119,178	1,312,174
Maine	368	435	676	578	913	5,663
Maryland	NA	16,422	NA	NA	27,199	176,323
Massachusetts	NA	NA	NA	NA	28,106	335,874
Michigan	53,211	75,400	111,785	107,100	132,212	813,457
Minnesota	17,194	24,430	36,635	41,073	52,956	305,174
Mississippi	18,817	NA	17,675	16,487	NA	201,209
Missouri	13,831	21,996	30,612	NA	45,959	253,682
Montana	4,256	5,177	5,599	6,596	8,249	54,071
Nebraska	6,720	9,429	12,423	13,573	18,652	127,779
Nevada	12,027	12,159	12,831	13,229	15,481	142,970
New Hampshire	^R 1,286	1,909	2,539	2,590	3,115	19,103
New Jersey	^R 38,247	^R 54,099	^R 76,316	^R 78,919	^R 89,709	579,099
New Mexico	9,600	NA	13,947	13,244	NA	127,354
New York	NA	NA	NA	NA	NA	1,135,250
North Carolina	13,830	18,265	25,942	21,876	27,646	206,129
North Dakota	2,600	3,371	4,608	5,967	5,837	40,782
Ohio	46,408	72,047	108,748	107,797	121,138	794,255
Oklahoma	33,084	39,299	39,844	37,005	48,202	483,117
Oregon	15,061	16,583	18,300	19,220	21,832	192,094
Pennsylvania	37,043	55,521	81,221	82,151	90,650	587,218
Rhode Island	4,942	5,782	6,963	7,279	8,396	85,811
South Carolina	10,717	12,499	16,590	14,070	17,472	153,476
South Dakota	1,684	2,780	3,308	3,647	5,059	29,383
Tennessee	NA	^R 20,971	^R 28,572	28,478	38,880	263,778
Texas	NA	264,665	262,704	257,691	296,777	3,634,920
Utah	8,135	12,390	12,665	15,666	16,888	139,380
Vermont	492	756	1,017	1,023	1,184	7,726
Virginia	16,306	20,645	28,606	27,709	29,226	234,692
Washington	NA	NA	NA	NA	NA	254,067
West Virginia	NA	NA	NA	11,820	14,083	104,879
Wisconsin	19,895	28,658	43,165	43,693	61,196	355,650
Wyoming	4,014	4,887	5,432	5,822	6,599	77,656
Total	^R1,375,166	^R1,621,900	^R1,985,260	^R1,966,091	^R2,341,193	19,469,047

^R Revised Data.

NA Not Available.

Notes: Geographic coverage is the 50 States and the District of Columbia. Gas volumes delivered for use as vehicle fuel are included in the annual total for commercial deliveries but not in the monthly components. See

Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Sources: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers" and Form EIA-759, "Monthly Power Plant Report."

Table 20. Average City Gate Price, by State, 1998-2000

(Dollars per Thousand Cubic Feet)

State	YTD 2000	YTD 1999	YTD 1998	2000				
				July	June	May	April	March
Alabama	3.55	2.88	3.13	5.50	5.70	4.20	3.40	3.43
Alaska	1.60	1.31	1.72	1.53	1.59	1.62	1.60	1.64
Arizona	3.47	2.45	2.58	5.66	5.21	3.84	3.54	3.05
Arkansas	NA	NA	2.98	NA	NA	NA	NA	NA
California	3.44	2.34	2.35	4.70	4.42	3.44	3.40	2.90
Colorado	NA	NA	2.60	NA	NA	NA	NA	NA
Connecticut	6.01	4.68	5.18	7.54	7.99	6.62	5.67	5.59
Delaware	3.04	3.61	2.70	2.37	2.99	2.82	2.74	3.04
District of Columbia	8.69	—	—	—	—	—	—	—
Florida	4.03	3.19	3.41	5.05	5.32	4.07	4.12	3.57
Georgia	NA	NA	3.45	4.81	NA	0.27	3.29	NA
Hawaii	7.85	4.93	5.49	8.17	8.46	8.84	8.05	6.96
Idaho	2.85	1.85	1.94	5.32	4.08	3.13	3.15	2.64
Illinois	3.73	2.72	2.89	5.96	7.23	4.38	3.47	3.30
Indiana	NA	NA	2.43	NA	NA	3.02	2.91	NA
Iowa	3.84	2.96	3.30	6.39	5.45	7.00	3.72	3.75
Kansas	3.76	NA	2.99	5.57	4.82	4.02	3.44	3.48
Kentucky	3.93	3.13	3.31	5.11	4.88	4.94	3.55	3.90
Louisiana	NA	2.36	2.43	NA	4.84	3.68	3.85	3.39
Maine	NA	NA	3.57	NA	NA	NA	5.01	NA
Maryland	4.26	NA	3.82	8.23	8.46	6.79	4.47	4.18
Massachusetts	NA	NA	4.00	NA	NA	NA	NA	NA
Michigan	3.06	2.81	2.81	3.33	3.02	3.00	3.06	2.90
Minnesota	NA	2.76	2.99	5.64	5.22	3.64	3.33	3.63
Mississippi	NA	NA	3.04	4.82	3.61	3.39	NA	3.50
Missouri	3.93	3.09	3.34	7.35	7.33	5.62	4.33	3.68
Montana	2.97	2.48	2.48	3.50	3.25	2.90	2.80	3.02
Nebraska	3.59	3.03	3.04	5.54	5.11	3.73	3.69	3.36
Nevada	NA	2.15	3.16	5.77	5.24	4.39	4.01	3.55
New Hampshire	NA	3.72	3.83	NA	NA	NA	4.16	4.65
New Jersey	4.86	3.89	3.61	8.07	^R 10.86	^R 6.02	^R 4.91	^R 4.12
New Mexico	2.75	2.04	2.11	3.78	3.77	2.96	2.70	2.50
New York	NA	NA	2.59	NA	NA	NA	NA	NA
North Carolina	4.31	3.10	3.65	5.99	6.44	4.47	4.05	3.83
North Dakota	NA	2.78	2.79	8.28	4.78	4.12	3.59	3.66
Ohio	5.62	4.88	4.73	8.41	5.89	7.94	5.93	6.73
Oklahoma	NA	2.77	2.56	4.14	3.19	3.36	2.88	3.01
Oregon	3.30	2.73	2.71	4.70	4.22	3.59	3.31	3.04
Pennsylvania	4.39	3.44	4.30	7.83	7.48	^R 6.08	4.28	4.72
Rhode Island	3.44	3.95	4.17	5.36	4.87	3.74	2.92	3.17
South Carolina	4.23	3.27	3.43	5.93	5.73	4.55	4.14	3.84
South Dakota	4.19	3.40	3.39	6.92	6.39	7.12	4.09	3.83
Tennessee	NA	NA	3.66	5.74	NA	3.89	3.74	3.28
Texas	NA	2.67	2.70	NA	4.41	3.08	3.20	2.87
Utah	3.36	2.78	3.18	3.15	3.14	2.73	3.09	3.68
Vermont	3.73	2.96	2.71	4.08	4.05	4.10	3.71	3.80
Virginia	4.13	NA	3.80	6.37	6.32	7.25	3.28	4.01
Washington	NA	NA	2.41	NA	NA	NA	NA	NA
West Virginia	NA	NA	3.11	4.97	4.12	3.06	3.26	NA
Wisconsin	3.55	2.87	3.36	5.88	5.67	4.20	3.41	3.44
Wyoming	4.54	3.13	2.43	4.88	4.56	4.04	4.96	4.78
Total	3.82	2.95	3.11	5.13	^R5.21	^R4.00	^R3.72	^R3.57

See footnotes at end of table.

Table 20. Average City Gate Price, by State, 1998-2000

(Dollars per Thousand Cubic Feet) — Continued

State	2000		1999					
	February	January	Total	December	November	October	September	August
Alabama	3.05	2.95	3.16	3.39	3.74	4.16	4.10	3.62
Alaska	1.56	1.61	1.32	1.32	1.34	1.36	1.41	1.11
Arizona	2.97	2.70	2.72	2.68	3.37	3.30	3.66	3.52
Arkansas	NA	NA	NA	2.26	NA	NA	2.74	2.98
California	2.88	2.59	2.60	2.67	3.25	3.35	3.00	2.80
Colorado	NA	NA	NA	2.27	NA	2.46	2.98	NA
Connecticut	6.00	5.40	4.91	5.42	5.81	4.58	5.85	4.52
Delaware	3.29	3.80	3.45	2.78	3.48	2.73	4.01	3.53
District of Columbia	8.69	—	—	—	—	—	—	—
Florida	3.55	3.40	3.36	3.65	3.50	3.74	3.60	3.53
Georgia	NA	NA	NA	NA	NA	NA	NA	NA
Hawaii	7.40	7.14	5.62	7.40	7.20	6.48	6.23	5.59
Idaho	2.52	2.50	2.23	2.50	3.07	2.94	3.27	2.74
Illinois	3.13	2.93	3.00	3.13	3.55	3.41	3.87	3.73
Indiana	NA	NA	NA	^R 2.57	^R 3.09	^R 2.79	^R 2.85	2.86
Iowa	3.47	3.03	3.28	3.98	3.95	3.49	3.71	3.97
Kansas	3.61	3.21	NA	3.12	3.60	3.41	3.91	4.88
Kentucky	3.88	3.65	3.27	3.42	3.82	3.63	3.46	2.85
Louisiana	3.30	2.96	2.63	2.71	3.84	3.16	3.34	2.86
Maine	2.92	4.08	NA	4.33	2.66	3.37	2.69	3.18
Maryland	3.94	3.53	NA	3.29	4.28	4.12	5.38	6.24
Massachusetts	NA	NA	NA	NA	NA	NA	NA	NA
Michigan	3.01	3.11	2.83	2.93	2.95	2.86	2.83	2.79
Minnesota	NA	NA	NA	NA	NA	2.85	3.72	3.52
Mississippi	3.32	3.10	NA	3.05	3.49	3.29	3.30	3.05
Missouri	3.40	3.07	3.34	3.02	3.87	4.23	5.38	5.25
Montana	3.05	2.72	2.57	2.91	3.00	2.65	2.30	2.12
Nebraska	3.54	2.97	3.12	3.50	3.79	3.14	3.28	2.33
Nevada	3.50	NA	2.59	3.27	3.01	3.20	3.94	5.42
New Hampshire	3.91	3.80	4.04	4.09	6.30	3.40	5.64	3.96
New Jersey	^R 3.70	^R 3.89	^R 4.66	^R 4.22	^R 4.95	^R 5.67	^R 7.65	^R 7.06
New Mexico	2.36	2.50	NA	2.42	2.64	NA	NA	NA
New York	NA	NA	NA	NA	NA	NA	NA	NA
North Carolina	3.99	3.57	3.33	3.61	3.94	3.74	3.90	3.52
North Dakota	NA	NA	NA	NA	4.13	3.38	3.41	3.35
Ohio	4.85	4.98	4.83	4.48	4.66	4.90	5.21	6.55
Oklahoma	2.66	NA	2.84	3.59	3.56	2.64	2.84	1.87
Oregon	3.14	2.97	2.94	3.03	3.44	3.10	3.64	4.05
Pennsylvania	3.87	3.44	3.64	3.33	4.03	4.09	4.98	6.70
Rhode Island	3.30	3.45	4.18	5.29	4.37	4.79	4.95	3.15
South Carolina	3.84	3.60	3.47	3.51	3.86	3.73	4.14	3.85
South Dakota	4.04	3.26	3.52	3.67	4.05	3.37	3.50	4.02
Tennessee	3.74	3.06	NA	3.69	4.21	3.71	3.53	4.18
Texas	2.97	2.98	2.84	2.92	3.45	3.17	2.98	2.98
Utah	3.44	3.45	2.98	3.54	3.34	2.75	3.23	2.93
Vermont	3.56	3.46	2.85	1.43	3.85	3.42	2.68	2.70
Virginia	4.10	3.71	NA	3.34	4.37	3.73	7.51	5.60
Washington	NA	NA	NA	NA	NA	NA	NA	NA
West Virginia	NA	3.45	NA	3.07	3.82	3.46	1.33	NA
Wisconsin	3.20	2.94	3.08	2.79	4.03	3.34	4.26	4.14
Wyoming	4.37	4.39	NA	4.03	NA	3.28	3.99	3.81
Total	^R3.50	^R3.33	^R3.15	^R3.19	^R3.77	^R3.43	^R3.71	^R3.60

See footnotes at end of table.

Table 20. Average City Gate Price, by State, 1998-2000

(Dollars per Thousand Cubic Feet) — Continued

State	1999							1998
	July	June	May	April	March	February	January	Total
Alabama	3.69	4.00	3.15	2.70	2.65	2.79	2.62	3.17
Alaska	1.26	1.27	1.23	1.32	1.33	1.34	1.32	1.72
Arizona	3.26	3.16	3.03	2.39	2.18	2.19	2.17	2.55
Arkansas	3.04	NA	NA	2.71	2.58	3.40	2.69	2.94
California	2.51	2.57	2.71	2.17	2.07	2.25	2.23	2.38
Colorado	NA	2.44	2.36	1.14	1.84	2.07	2.25	2.40
Connecticut	5.39	4.33	5.19	4.87	4.57	4.74	4.44	5.06
Delaware	4.43	5.10	3.91	3.12	3.33	3.68	3.63	3.02
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.22	3.27	3.27	2.99	3.11	3.19	3.33	3.42
Georgia	3.42	4.10	NA	3.11	3.33	3.45	4.41	3.51
Hawaii	5.61	5.45	4.72	4.68	4.53	4.47	5.07	5.33
Idaho	2.72	1.50	1.69	1.94	1.82	1.92	1.76	1.95
Illinois	3.23	3.17	3.62	2.63	2.51	2.59	2.49	2.77
Indiana	2.32	2.47	NA	^R 2.26	^R 2.17	^R 2.24	^R 2.20	2.45
Iowa	3.54	4.26	3.63	3.03	2.77	3.02	2.63	3.34
Kansas	2.52	3.08	2.94	2.54	NA	NA	NA	2.96
Kentucky	3.06	2.89	3.63	3.72	2.79	3.10	3.21	3.23
Louisiana	2.54	2.63	2.74	2.46	2.16	2.19	2.18	2.33
Maine	5.39	3.67	NA	5.48	3.05	2.84	3.27	3.43
Maryland	NA	5.86	NA	NA	NA	NA	2.87	4.12
Massachusetts	NA	NA	5.89	NA	NA	NA	NA	4.01
Michigan	2.83	2.63	2.83	2.75	2.79	3.02	2.79	2.80
Minnesota	3.30	3.23	2.87	2.49	2.70	2.84	2.60	2.98
Mississippi	2.84	2.49	2.66	NA	2.61	2.71	NA	3.00
Missouri	5.14	4.90	4.56	3.43	2.75	2.89	2.49	3.33
Montana	2.08	2.20	1.37	2.39	2.98	2.70	2.76	2.43
Nebraska	3.25	3.24	3.45	2.94	2.90	3.11	2.90	3.02
Nevada	0.83	3.60	3.07	2.13	2.31	2.54	2.42	3.02
New Hampshire	6.94	4.47	3.32	3.59	3.24	3.56	3.73	3.75
New Jersey	^R 5.87	^R 7.37	^R 7.14	^R 4.02	^R 1.42	^R 3.65	^R 3.39	3.71
New Mexico	2.06	2.13	2.06	1.81	1.98	2.08	2.13	2.08
New York	NA	NA	NA	NA	NA	NA	NA	2.65
North Carolina	3.21	3.34	3.52	3.25	2.73	3.00	3.11	3.49
North Dakota	2.90	2.83	2.97	2.57	2.58	2.84	2.85	2.81
Ohio	5.07	5.81	6.71	7.73	4.43	4.62	4.22	4.70
Oklahoma	2.19	2.47	2.23	2.35	2.36	5.21	2.41	2.55
Oregon	3.74	3.28	2.84	2.66	2.59	2.68	2.43	2.73
Pennsylvania	5.13	4.35	4.28	3.77	2.95	3.42	3.10	4.12
Rhode Island	5.41	4.73	5.37	3.05	3.79	3.87	3.95	3.78
South Carolina	3.63	3.80	3.85	3.43	2.86	3.09	3.14	3.39
South Dakota	4.03	3.72	4.21	3.37	3.25	3.37	3.18	3.24
Tennessee	3.25	2.75	2.81	NA	2.79	2.76	2.86	3.47
Texas	2.77	2.78	2.86	2.45	2.38	2.61	2.83	2.63
Utah	4.04	2.62	2.07	2.31	2.76	3.11	2.86	3.22
Vermont	2.63	3.12	3.34	3.07	2.92	3.01	2.85	2.58
Virginia	7.13	5.27	NA	3.70	3.35	2.97	3.31	3.74
Washington	NA	NA	NA	NA	NA	NA	NA	2.34
West Virginia	3.16	3.89	2.64	NA	NA	3.21	6.98	3.17
Wisconsin	3.84	4.78	3.62	2.83	2.64	2.77	2.47	3.29
Wyoming	3.51	2.81	3.01	3.23	2.85	3.49	3.07	2.73
Total	^R3.25	3.21	^R3.43	^R2.90	2.68	^R2.93	^R2.84	3.07

^R Revised Data.

NA Not Available.

— Not Applicable.

Notes: Geographic coverage is the 50 States and the District of Columbia. Prices in this table represent the average price of natural gas by State at the

point where the gas transferred from a pipeline to a local distribution company within the State. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 21. Average Price of Natural Gas Delivered to Residential Consumers, by State, 1998-2000

(Dollars per Thousand Cubic Feet)

State	YTD 2000	YTD 1999	YTD 1998	2000				
				July	June	May	April	March
Alabama	8.40	7.96	7.71	13.23	12.23	9.53	9.08	9.21
Alaska	3.51	3.65	3.74	4.20	3.86	3.66	3.45	3.53
Arizona	9.05	8.75	7.97	14.76	12.42	11.19	9.23	8.43
Arkansas	NA	6.60	6.69	NA	NA	NA	NA	NA
California	7.22	6.48	6.92	8.90	8.35	7.75	7.17	7.05
Colorado	NA	4.99	5.03	NA	NA	NA	NA	NA
Connecticut	10.84	10.17	10.43	13.50	13.08	11.02	11.04	10.54
Delaware	7.86	8.40	8.55	9.66	9.41	7.19	8.25	7.96
District of Columbia	8.88	NA	8.74	9.68	8.59	9.87	9.28	8.99
Florida	12.16	11.54	10.72	14.86	14.99	14.18	13.27	11.95
Georgia	NA	NA	7.32	10.37	NA	7.13	6.31	8.44
Hawaii	21.11	18.46	19.38	22.09	22.20	22.11	20.93	20.37
Idaho	5.69	5.24	5.26	7.23	6.22	6.00	5.74	5.61
Illinois	6.04	5.08	5.47	11.19	9.87	8.60	6.23	5.71
Indiana	NA	NA	6.67	NA	NA	8.43	6.62	NA
Iowa	6.70	5.66	5.81	12.12	13.08	12.10	6.91	6.26
Kansas	6.61	NA	5.91	10.41	9.61	7.97	6.80	6.38
Kentucky	6.30	5.42	5.90	10.17	9.64	8.52	6.75	6.21
Louisiana	NA	6.21	6.25	NA	10.68	8.46	6.81	6.99
Maine	NA	7.56	8.26	NA	NA	NA	8.96	9.30
Maryland	8.67	NA	8.02	15.45	13.77	11.46	8.96	8.71
Massachusetts	NA	NA	9.23	NA	NA	NA	NA	NA
Michigan	5.08	5.00	5.12	7.30	6.70	5.63	5.11	4.94
Minnesota	NA	5.30	5.41	9.64	8.93	7.04	6.11	5.86
Mississippi	NA	NA	5.95	9.24	10.17	5.87	NA	6.86
Missouri	6.73	5.92	6.31	11.58	10.55	8.35	6.92	6.34
Montana	5.60	4.98	5.11	8.11	7.19	6.42	5.27	5.43
Nebraska	5.56	4.70	5.11	9.85	8.46	6.95	5.72	5.38
Nevada	NA	7.06	6.95	8.11	7.67	7.18	6.79	6.25
New Hampshire	8.12	7.36	8.10	8.35	8.35	7.71	7.18	8.51
New Jersey	7.52	7.69	6.86	9.10	^R 9.15	^R 7.60	^R 7.58	^R 7.58
New Mexico	NA	5.05	5.50	NA	4.69	9.11	4.99	6.04
New York	NA	NA	9.28	NA	NA	NA	NA	NA
North Carolina	8.68	7.83	8.31	14.80	12.53	10.95	8.47	9.07
North Dakota	NA	4.91	4.96	10.16	7.57	6.66	5.36	5.04
Ohio	6.51	5.97	6.21	9.74	8.71	7.30	6.43	6.30
Oklahoma	6.33	5.28	5.71	9.94	9.51	7.64	6.35	6.23
Oregon	7.55	7.05	6.61	9.30	8.42	7.91	7.18	7.48
Pennsylvania	NA	8.09	8.37	NA	NA	NA	NA	7.79
Rhode Island	7.15	9.23	9.29	11.97	10.64	9.28	9.46	8.73
South Carolina	8.89	8.43	8.04	11.07	10.44	9.05	8.86	9.53
South Dakota	6.41	5.42	5.53	10.87	10.19	9.27	6.24	5.97
Tennessee	NA	NA	6.51	10.12	NA	7.90	7.54	7.34
Texas	NA	5.58	5.99	NA	9.97	6.99	6.91	6.20
Utah	6.24	5.23	5.55	6.99	6.99	6.82	6.36	5.91
Vermont	7.67	6.82	6.52	9.89	8.89	8.11	7.71	7.45
Virginia	8.46	NA	8.37	13.98	12.54	9.80	8.90	8.32
Washington	NA	NA	5.82	NA	NA	NA	NA	NA
West Virginia	NA	NA	7.09	10.85	9.60	7.80	7.50	NA
Wisconsin	6.55	6.08	6.19	9.21	9.56	6.59	7.10	6.49
Wyoming	5.23	5.16	5.15	6.70	6.17	5.45	5.38	5.05
Total	6.88	6.33	6.73	9.78	^R9.02	^R7.87	^R7.00	^R6.77

See footnotes at end of table.

Table 21. Average Price of Natural Gas Delivered to Residential Consumers, by State, 1998-2000

(Dollars per Thousand Cubic Feet) — Continued

State	2000		1999					
	February	January	Total	December	November	October	September	August
Alabama	7.21	7.41	8.37	8.22	9.17	10.27	11.61	11.91
Alaska	3.36	3.34	3.64	3.45	3.58	3.70	3.84	4.27
Arizona	8.33	7.88	9.18	8.76	10.32	11.84	12.63	12.84
Arkansas	NA	NA	NA	6.56	NA	9.42	8.95	10.63
California	6.99	6.30	6.62	6.52	7.13	7.51	6.88	7.21
Colorado	NA	NA	5.24	5.13	5.64	6.04	7.43	7.59
Connecticut	10.51	10.49	10.39	11.04	10.89	11.17	9.77	11.45
Delaware	7.76	7.40	8.62	8.02	8.99	10.69	12.48	12.52
District of Columbia	8.69	8.54	NA	8.02	10.10	11.34	12.39	8.28
Florida	10.45	10.62	12.12	11.19	12.87	14.76	15.03	14.74
Georgia	7.36	6.74	NA	7.56	7.98	6.78	8.40	10.62
Hawaii	20.31	19.99	18.97	20.18	19.50	20.03	19.71	19.38
Idaho	5.56	5.45	5.43	5.57	5.82	5.92	6.58	6.55
Illinois	5.32	5.12	5.53	5.39	6.31	6.91	8.49	9.46
Indiana	NA	5.41	NA	5.43	6.13	6.57	8.75	9.10
Iowa	5.73	5.27	6.11	6.10	6.52	7.56	9.24	13.37
Kansas	6.03	5.98	NA	6.18	7.02	7.58	9.02	8.66
Kentucky	6.04	5.56	5.73	5.93	5.87	7.00	7.53	8.16
Louisiana	6.13	5.92	6.90	7.30	8.44	9.10	9.59	9.37
Maine	7.34	7.87	7.50	6.63	7.40	7.83	9.10	9.13
Maryland	7.67	7.38	NA	8.19	9.02	10.03	12.70	12.97
Massachusetts	NA	NA	NA	NA	NA	NA	NA	NA
Michigan	4.79	4.77	5.12	4.85	5.13	5.59	7.15	7.75
Minnesota	NA	NA	NA	NA	NA	6.25	7.47	7.91
Mississippi	5.66	5.81	NA	5.87	7.03	7.62	7.77	7.77
Missouri	6.04	6.16	6.28	6.38	6.84	7.73	9.35	10.48
Montana	5.28	5.25	5.15	5.03	5.32	5.57	6.27	7.46
Nebraska	5.06	4.76	5.06	5.23	6.02	6.52	7.73	8.04
Nevada	6.25	NA	7.10	6.16	7.18	8.24	8.85	9.03
New Hampshire	8.32	8.15	7.73	8.65	9.07	7.25	8.75	9.29
New Jersey	^R 7.16	^R 7.29	^R 7.81	^R 7.72	^R 7.55	^R 8.57	^R 9.61	^R 9.40
New Mexico	5.26	5.72	4.96	4.10	3.78	4.46	9.67	10.81
New York	NA	NA	NA	NA	NA	NA	NA	NA
North Carolina	7.58	8.27	8.32	8.95	8.95	10.76	11.70	13.19
North Dakota	4.73	NA	NA	NA	5.71	6.10	7.31	7.90
Ohio	6.09	6.18	NA	6.36	6.57	6.76	8.04	NA
Oklahoma	5.57	5.80	5.85	6.23	8.06	8.21	9.13	9.49
Oregon	7.42	7.33	7.17	7.10	7.16	7.67	8.64	8.91
Pennsylvania	NA	7.31	8.22	7.67	8.14	9.20	10.69	11.99
Rhode Island	4.23	8.87	9.53	9.54	10.00	10.45	12.23	12.29
South Carolina	8.40	8.76	8.61	8.76	8.85	9.37	10.20	10.46
South Dakota	5.87	5.36	5.83	6.10	6.27	7.09	8.26	9.81
Tennessee	6.45	6.03	NA	7.47	7.48	8.43	8.06	9.25
Texas	5.49	5.26	6.03	5.53	7.26	8.43	9.00	9.13
Utah	6.16	6.16	5.37	5.49	5.90	5.11	5.44	6.25
Vermont	7.33	7.42	7.13	7.65	7.51	7.63	9.33	9.38
Virginia	7.78	7.65	NA	8.16	9.57	12.04	14.20	14.40
Washington	NA	NA	NA	NA	NA	NA	NA	NA
West Virginia	7.02	7.44	NA	NA	NA	8.09	9.61	NA
Wisconsin	6.19	5.99	6.19	6.09	6.98	5.47	7.21	7.45
Wyoming	4.94	5.00	5.28	5.14	5.48	5.45	6.09	7.18
Total	^R 6.39	^R 6.24	^R 6.58	^R 6.42	^R 7.04	^R 7.48	^R 8.43	^R 8.95

See footnotes at end of table.

Table 21. Average Price of Natural Gas Delivered to Residential Consumers, by State, 1998-2000

(Dollars per Thousand Cubic Feet) — Continued

State	1999							1998
	July	June	May	April	March	February	January	Total
Alabama	11.38	10.98	9.83	7.83	7.03	8.29	7.13	8.21
Alaska	4.31	4.10	3.81	3.65	3.59	3.53	3.53	3.67
Arizona	12.26	11.03	9.57	8.75	8.57	8.17	8.03	8.50
Arkansas	9.65	9.45	8.25	6.70	6.16	6.94	5.66	6.85
California	7.04	6.82	6.22	5.98	6.22	6.54	6.82	6.92
Colorado	7.16	6.13	5.12	5.00	4.86	4.75	4.60	5.22
Connecticut	10.47	10.78	11.30	10.29	10.08	10.18	9.71	10.60
Delaware	10.58	10.97	9.32	8.39	8.05	8.10	8.05	8.90
District of Columbia	NA	8.24	8.95	7.96	7.76	8.25	8.61	8.91
Florida	14.25	13.92	12.64	11.46	10.58	11.16	10.29	11.29
Georgia	11.45	10.16	NA	4.12	2.44	2.38	2.01	6.78
Hawaii	18.71	18.56	18.60	18.04	18.15	18.34	18.79	19.25
Idaho	6.21	5.83	5.46	5.31	5.10	5.13	5.03	5.33
Illinois	8.85	8.12	7.66	5.27	4.63	4.62	4.46	5.47
Indiana	9.27	8.86	7.64	NA	NA	NA	5.36	6.56
Iowa	9.40	11.36	7.77	6.00	5.26	5.07	4.79	5.96
Kansas	8.77	7.74	6.65	5.60	NA	NA	NA	6.00
Kentucky	8.17	7.75	6.75	5.46	4.82	5.27	5.24	6.03
Louisiana	8.55	8.03	7.58	6.19	5.98	5.86	5.42	6.68
Maine	9.11	9.24	8.64	7.85	7.38	7.34	7.00	8.09
Maryland	NA	11.87	NA	7.98	NA	NA	7.37	8.29
Massachusetts	NA	NA	NA	NA	NA	9.19	9.39	9.42
Michigan	7.68	6.46	5.72	5.10	4.78	4.76	4.68	5.17
Minnesota	8.04	7.19	6.26	5.21	5.08	5.06	4.96	5.48
Mississippi	7.22	7.12	6.92	NA	4.94	5.94	4.84	6.08
Missouri	9.85	6.09	7.08	6.06	5.41	5.70	5.71	6.57
Montana	6.58	5.99	4.66	4.95	4.94	4.93	4.75	5.25
Nebraska	7.13	6.76	5.33	4.70	4.47	4.38	4.37	5.13
Nevada	8.86	8.15	7.39	7.00	6.94	6.75	6.70	7.11
New Hampshire	8.68	7.88	6.38	5.67	8.23	7.60	7.44	8.12
New Jersey	^R 9.57	^R 8.39	^R 8.26	^R 7.69	^R 7.48	^R 7.55	^R 7.48	7.33
New Mexico	9.10	8.08	8.82	5.63	4.03	4.92	3.54	5.22
New York	NA	NA	NA	NA	NA	NA	NA	9.59
North Carolina	11.74	12.98	8.76	7.92	6.20	8.40	7.56	8.69
North Dakota	7.54	7.23	5.19	4.71	4.76	4.67	4.62	5.16
Ohio	8.41	7.89	6.83	5.83	5.63	5.69	5.87	6.43
Oklahoma	8.80	3.77	6.95	5.59	5.33	5.48	4.45	5.93
Oregon	10.50	7.75	7.26	7.04	6.91	6.80	6.68	6.81
Pennsylvania	11.40	10.69	9.19	7.68	7.73	7.78	7.80	8.45
Rhode Island	12.14	11.36	9.79	9.48	8.88	8.90	8.71	9.56
South Carolina	10.20	9.89	8.48	8.17	7.81	9.14	8.25	8.30
South Dakota	8.69	8.46	6.48	5.43	5.00	5.09	4.89	5.59
Tennessee	8.86	9.32	NA	^R 6.29	^R 5.83	6.06	5.71	6.73
Texas	7.40	7.90	6.94	6.00	5.18	5.20	4.89	6.16
Utah	5.54	5.78	4.83	4.19	5.59	5.33	5.51	5.57
Vermont	9.33	8.42	7.41	6.83	6.68	6.29	6.64	6.54
Virginia	13.85	13.36	NA	8.72	7.34	7.98	7.96	8.57
Washington	NA	NA	NA	NA	NA	NA	NA	5.84
West Virginia	10.66	9.88	NA	NA	NA	6.96	6.90	7.29
Wisconsin	7.14	6.70	5.91	6.13	6.05	6.28	5.82	6.15
Wyoming	6.74	5.94	5.08	5.03	5.19	5.03	4.98	5.19
Total	^R8.53	^R7.90	^R7.07	^R6.28	^R5.96	^R6.19	^R5.94	6.82

^R Revised Data.

NA Not Available.

Notes: Data for 1998 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District

of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 22. Average Price of Natural Gas Sold to Commercial Consumers, by State, 1998-2000

(Dollars per Thousand Cubic Feet)

State	YTD 2000	YTD 1999	YTD 1998	2000				
				July	June	May	April	March
Alabama	7.08	6.55	6.50	8.72	8.23	7.12	7.09	7.39
Alaska	2.04	2.22	2.34	1.76	2.02	1.91	1.96	2.13
Arizona	6.40	6.12	5.85	7.18	6.58	6.60	6.31	6.23
Arkansas	NA	NA	5.17	NA	NA	NA	NA	NA
California	6.74	5.63	6.53	7.49	6.97	6.55	6.74	6.89
Colorado	NA	NA	4.43	NA	NA	NA	NA	NA
Connecticut	6.55	6.57	7.08	4.99	6.16	5.26	7.01	6.27
Delaware	6.38	6.86	6.89	7.28	6.89	6.85	6.58	6.40
District of Columbia	8.07	NA	7.29	7.19	7.25	7.77	8.15	8.34
Florida	7.31	6.34	6.52	8.12	7.79	7.49	7.24	7.12
Georgia	NA	NA	6.40	6.29	NA	5.47	5.23	5.20
Hawaii	16.80	13.60	14.39	17.41	17.66	17.59	16.71	16.09
Idaho	4.99	4.63	4.56	5.74	5.10	5.12	5.13	4.88
Illinois	5.69	4.84	5.05	9.98	10.39	7.63	5.92	5.41
Indiana	NA	NA	5.69	7.12	NA	6.62	5.57	5.57
Iowa	5.49	4.50	4.65	7.75	8.95	9.59	5.48	5.17
Kansas	4.33	NA	4.95	4.92	4.85	3.91	4.10	4.16
Kentucky	5.65	4.86	5.48	7.09	6.89	6.47	5.78	5.61
Louisiana	NA	5.36	5.49	NA	8.70	6.29	5.61	5.94
Maine	NA	6.76	7.48	NA	NA	NA	7.44	NA
Maryland	7.20	NA	6.52	9.07	8.64	7.20	8.09	7.27
Massachusetts	NA	NA	7.44	NA	NA	NA	NA	NA
Michigan	4.78	4.80	4.89	6.01	5.53	5.00	4.80	4.69
Minnesota	NA	4.27	4.45	6.66	6.33	5.21	5.00	4.94
Mississippi	NA	NA	4.92	6.54	8.85	5.58	NA	5.58
Missouri	5.95	5.27	5.68	7.20	6.83	6.24	6.09	5.54
Montana	4.94	4.93	5.01	5.91	5.81	5.21	4.54	4.97
Nebraska	4.64	3.98	4.48	5.95	5.57	4.73	4.64	4.65
Nevada	5.49	6.02	6.09	5.80	5.66	5.65	5.50	5.39
New Hampshire	NA	NA	7.28	NA	NA	NA	6.67	NA
New Jersey	4.55	4.00	4.01	4.60	^R 5.27	^R 2.06	^R 5.21	^R 4.53
New Mexico	4.24	3.31	4.31	4.91	3.53	3.91	7.27	4.06
New York	NA	NA	6.36	NA	3.09	NA	NA	NA
North Carolina	6.79	6.07	6.59	7.70	7.01	6.60	6.17	7.35
North Dakota	NA	4.15	4.24	7.36	5.63	5.29	4.64	4.51
Ohio	6.05	5.53	5.71	8.03	7.33	6.61	5.86	5.86
Oklahoma	5.74	4.89	5.13	6.88	6.69	5.44	5.40	5.88
Oregon	6.09	5.63	5.17	6.48	6.16	6.07	6.06	6.06
Pennsylvania	NA	8.94	7.59	3.33	3.60	NA	7.50	7.31
Rhode Island	7.63	7.94	8.00	9.33	8.70	8.14	7.97	7.70
South Carolina	7.21	6.47	6.57	7.18	7.05	6.61	7.02	7.57
South Dakota	5.01	4.22	4.43	7.00	7.18	6.97	4.77	4.64
Tennessee	NA	5.37	5.90	6.83	NA	6.06	6.38	6.52
Texas	NA	4.26	4.58	NA	5.92	4.31	4.89	4.41
Utah	4.62	3.94	4.25	4.40	4.40	4.37	4.24	4.63
Vermont	6.20	5.36	5.22	6.44	6.38	6.20	6.17	6.17
Virginia	6.41	5.86	6.10	7.70	7.23	6.45	6.30	6.18
Washington	NA	NA	4.70	NA	NA	NA	NA	NA
West Virginia	6.41	6.30	6.29	9.52	7.55	6.76	6.50	6.29
Wisconsin	5.36	4.81	4.82	6.65	6.47	4.96	5.93	5.34
Wyoming	4.57	4.51	4.80	6.17	4.83	4.63	4.80	3.76
Total	5.49	5.23	5.58	5.67	^R5.70	^R5.26	^R5.59	^R5.30

See footnotes at end of table.

Table 22. Average Price of Natural Gas Sold to Commercial Consumers, by State, 1998-2000

(Dollars per Thousand Cubic Feet) — Continued

State	2000		1999					
	February	January	Total	December	November	October	September	August
Alabama	6.49	6.78	6.71	6.98	7.07	6.88	7.22	7.31
Alaska	2.12	2.16	2.16	2.15	2.14	2.13	1.94	1.79
Arizona	6.24	6.14	6.18	6.21	6.34	6.32	6.27	6.38
Arkansas	NA	NA	NA	4.25	NA	NA	NA	5.77
California	6.87	6.05	5.83	6.40	6.38	6.33	5.96	6.08
Colorado	NA	NA	NA	4.48	4.41	NA	4.49	NA
Connecticut	6.82	7.97	6.59	7.87	6.91	6.10	5.27	4.91
Delaware	6.46	5.69	7.02	6.94	7.21	7.51	8.20	8.78
District of Columbia	8.55	7.89	NA	—	8.72	8.35	8.14	6.92
Florida	6.98	6.87	6.52	6.84	6.98	6.85	6.89	6.63
Georgia	5.15	5.37	NA	5.83	5.95	11.91	7.36	5.59
Hawaii	16.12	16.02	14.33	15.80	15.90	15.71	14.90	14.45
Idaho	4.90	4.86	4.77	4.92	5.21	5.10	5.25	4.96
Illinois	5.08	4.95	5.25	5.39	6.18	6.36	7.26	8.57
Indiana	5.56	NA	NA	NA	NA	5.34	5.95	6.17
Iowa	4.91	4.57	4.80	5.23	5.28	5.47	5.80	6.19
Kansas	4.40	4.25	NA	5.81	6.09	5.51	4.78	4.92
Kentucky	5.28	5.43	5.15	5.78	5.61	5.78	5.60	5.73
Louisiana	5.67	5.46	5.70	6.10	6.68	6.22	6.45	6.23
Maine	6.79	6.65	6.70	6.25	6.68	6.84	6.89	6.89
Maryland	7.07	6.36	NA	6.61	7.52	8.19	8.76	7.34
Massachusetts	NA	NA	NA	NA	NA	NA	NA	NA
Michigan	4.65	4.66	4.84	4.58	4.93	5.18	5.71	6.08
Minnesota	5.00	NA	4.44	4.53	5.08	4.62	5.02	4.65
Mississippi	5.19	4.64	NA	4.95	5.41	5.01	4.62	4.88
Missouri	5.79	5.90	5.38	5.80	5.54	5.40	5.58	5.81
Montana	4.67	4.88	5.10	5.06	5.37	5.67	5.87	6.54
Nebraska	4.56	4.19	4.10	4.32	4.62	4.33	4.36	4.11
Nevada	5.44	5.37	5.99	5.39	6.00	6.31	6.50	6.33
New Hampshire	7.80	7.44	NA	7.78	7.83	5.92	6.19	6.66
New Jersey	^R 4.59	^R 4.93	^R 4.25	^R 5.21	^R 4.64	^R 4.62	^R 4.45	^R 4.60
New Mexico	4.00	4.22	3.38	3.49	3.01	2.83	4.16	5.60
New York	NA	NA	NA	NA	NA	NA	NA	NA
North Carolina	6.51	6.80	6.31	7.34	6.83	6.61	6.13	6.28
North Dakota	4.31	NA	NA	NA	NA	5.05	5.21	4.97
Ohio	5.84	5.96	NA	6.02	6.04	5.91	6.17	NA
Oklahoma	5.48	5.75	5.11	6.05	5.81	5.23	5.30	5.36
Oregon	6.06	6.04	5.80	5.90	5.63	7.76	5.95	5.98
Pennsylvania	7.11	6.77	8.38	7.01	6.90	7.76	7.70	8.21
Rhode Island	7.39	6.94	8.01	7.85	8.01	8.15	8.58	14.12
South Carolina	7.26	7.36	6.52	7.04	7.16	6.05	6.12	6.01
South Dakota	4.68	4.36	4.52	5.09	4.86	5.36	5.56	5.99
Tennessee	6.05	4.78	5.57	6.43	6.31	5.34	5.05	5.89
Texas	4.61	4.34	4.39	4.45	4.88	4.81	4.70	4.31
Utah	4.70	4.82	4.12	4.54	4.72	3.98	3.99	4.10
Vermont	6.18	6.20	5.54	6.20	5.98	5.54	5.68	5.76
Virginia	6.25	6.14	6.04	6.24	6.35	6.59	6.50	6.33
Washington	NA	NA	NA	NA	NA	NA	NA	NA
West Virginia	5.97	6.14	NA	NA	6.18	6.29	7.01	6.93
Wisconsin	5.15	5.07	4.94	5.20	5.83	4.12	5.50	4.98
Wyoming	4.46	4.43	4.50	4.39	4.53	4.52	4.50	4.92
Total	^R5.60	^R5.47	^R5.32	^R5.55	^R5.53	^R5.43	^R5.49	^R5.42

See footnotes at end of table.

Table 22. Average Price of Natural Gas Sold to Commercial Consumers, by State, 1998-2000

(Dollars per Thousand Cubic Feet) — Continued

State	1999							1998
	July	June	May	April	March	February	January	Total
Alabama	7.22	7.08	6.86	6.26	6.10	6.93	6.33	6.65
Alaska	1.83	1.76	1.95	2.28	2.34	2.38	2.44	2.41
Arizona	6.13	6.05	6.07	6.11	6.12	6.18	6.15	6.00
Arkansas	5.69	NA	NA	5.24	4.85	5.27	4.70	5.16
California	5.68	5.43	5.24	5.57	5.17	6.28	5.82	6.33
Colorado	4.47	4.38	4.18	NA	4.14	4.12	4.15	4.34
Connecticut	5.13	5.39	6.51	6.68	6.93	7.03	6.63	6.89
Delaware	8.29	7.89	7.31	6.82	6.69	6.59	6.68	7.05
District of Columbia	NA	6.84	6.64	6.70	6.92	7.06	7.53	7.36
Florida	6.50	6.35	6.29	6.19	6.22	6.42	6.41	6.40
Georgia	6.58	6.00	NA	3.43	2.17	2.35	3.78	6.00
Hawaii	14.46	14.00	13.28	13.08	13.19	13.41	13.79	14.15
Idaho	4.89	4.92	4.85	4.83	4.49	4.59	4.46	4.62
Illinois	7.98	7.15	6.61	4.83	4.46	4.48	4.47	5.07
Indiana	6.63	6.90	5.81	5.20	NA	^R 5.22	4.39	5.50
Iowa	6.25	6.44	5.51	4.67	4.11	4.30	4.12	4.67
Kansas	5.48	5.85	5.54	4.91	NA	NA	NA	4.98
Kentucky	5.75	5.59	4.36	5.03	4.39	4.93	4.98	5.43
Louisiana	5.79	5.56	5.56	5.24	5.29	5.22	5.25	5.64
Maine	6.81	6.70	7.20	7.01	6.81	6.79	6.48	7.23
Maryland	7.79	8.29	NA	7.03	NA	NA	6.49	6.64
Massachusetts	NA	6.12	6.24	7.79	7.72	NA	8.08	7.32
Michigan	5.86	5.67	5.14	4.94	4.69	4.68	4.65	4.90
Minnesota	4.50	4.61	4.38	4.01	4.20	4.25	4.33	4.39
Mississippi	4.45	4.44	4.79	NA	4.25	4.95	NA	4.74
Missouri	5.68	3.63	5.22	5.19	5.06	5.43	5.55	5.68
Montana	5.99	5.63	4.60	4.88	4.90	4.91	4.80	5.13
Nebraska	3.84	3.94	3.84	3.77	3.98	4.00	4.14	4.25
Nevada	6.49	6.40	6.09	6.10	5.89	5.92	5.85	6.28
New Hampshire	6.16	6.25	NA	5.40	6.97	7.15	6.89	7.18
New Jersey	^R 3.59	^R 3.76	^R 4.09	^R 3.80	^R 4.06	^R 3.99	^R 4.18	3.70
New Mexico	4.64	3.56	3.47	4.47	3.53	3.40	2.45	4.04
New York	NA	NA	NA	NA	NA	NA	NA	6.08
North Carolina	6.13	6.12	5.85	5.62	5.87	6.44	6.25	6.63
North Dakota	5.07	4.98	3.94	3.94	4.09	4.04	4.19	4.37
Ohio	6.60	6.55	5.82	5.37	5.26	5.33	5.67	5.83
Oklahoma	5.43	5.98	4.98	4.70	5.09	5.23	4.49	5.05
Oregon	5.83	5.75	5.65	5.65	5.63	5.64	5.51	5.25
Pennsylvania	7.83	8.96	7.09	19.91	7.00	7.22	7.26	7.43
Rhode Island	8.91	8.70	8.45	8.03	7.73	7.75	7.74	8.12
South Carolina	5.90	6.00	6.04	6.45	6.40	6.94	6.75	6.48
South Dakota	5.29	5.37	4.91	4.23	3.90	4.16	3.92	4.43
Tennessee	5.79	5.48	5.39	5.31	5.68	5.72	4.92	6.04
Texas	4.02	4.37	4.16	4.47	4.04	4.29	4.36	4.44
Utah	4.19	3.85	3.31	3.24	4.25	4.14	4.20	4.35
Vermont	5.72	5.64	5.57	5.50	5.49	5.23	5.12	5.08
Virginia	6.22	5.79	5.90	5.82	5.67	6.04	5.81	6.12
Washington	NA	NA	NA	NA	NA	NA	NA	4.75
West Virginia	6.76	6.95	6.88	6.06	6.19	6.23	6.23	6.26
Wisconsin	4.68	4.66	4.28	4.41	4.77	4.89	5.04	4.70
Wyoming	4.68	4.53	4.51	4.44	4.51	4.48	4.55	4.45
Total	^R5.29	^R5.30	^R5.19	^R5.74	^R5.04	^R5.23	^R5.11	5.48

^R Revised Data.

NA Not Available.

— Not Applicable.

Notes: Data for 1998 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. Average prices for gas delivered to commercial consumers

reflect onsystem sales prices only. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy. See Table 25 for data on onsystem sales expressed as a percentage of both total commercial and total industrial deliveries.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 23. Average Price of Natural Gas Sold to Industrial Consumers, by State, 1998-2000

(Dollars per Thousand Cubic Feet)

State	YTD 2000	YTD 1999	YTD 1998	2000				
				July	June	May	April	March
Alabama	3.82	3.19	3.32	4.79	4.75	3.65	3.57	3.44
Alaska	1.46	1.21	1.43	1.55	1.51	1.40	1.49	1.43
Arizona	3.93	3.38	3.34	4.70	4.50	4.00	4.10	3.53
Arkansas	4.63	NA	3.59	4.82	4.73	4.66	4.64	4.47
California	4.61	NA	3.95	5.75	5.09	4.53	4.45	4.37
Colorado	NA	NA	1.73	NA	NA	NA	NA	NA
Connecticut	5.25	4.06	4.56	5.43	4.86	4.67	5.00	5.49
Delaware	4.47	4.01	4.23	7.18	5.14	4.90	5.05	4.24
District of Columbia	—	—	—	—	—	—	—	—
Florida	4.60	3.87	4.12	5.08	5.29	4.88	3.93	4.49
Georgia	NA	2.94	4.29	4.58	NA	3.82	3.90	3.67
Hawaii	9.35	8.20	—	10.21	10.20	10.13	9.57	8.53
Idaho	3.57	3.25	3.08	4.47	3.43	3.44	3.53	3.42
Illinois	4.56	3.68	4.12	6.65	5.16	4.92	4.33	5.05
Indiana	4.47	NA	4.43	4.13	4.60	5.04	4.47	4.47
Iowa	4.28	3.50	3.30	5.21	3.55	6.15	4.26	4.26
Kansas	3.82	NA	3.39	4.10	3.81	3.28	3.86	3.56
Kentucky	4.03	3.09	4.13	4.76	4.41	4.03	3.76	3.60
Louisiana	3.43	2.21	2.67	4.57	4.41	3.27	3.15	2.94
Maine	NA	5.08	5.51	NA	NA	NA	5.42	5.80
Maryland	6.64	5.41	5.73	6.84	6.87	6.35	5.99	6.67
Massachusetts	NA	NA	5.99	NA	NA	NA	NA	NA
Michigan	4.08	3.85	3.86	4.48	4.67	4.17	4.08	4.18
Minnesota	3.68	2.76	2.94	4.98	4.72	3.53	3.46	3.29
Mississippi	NA	NA	3.32	5.09	4.71	3.64	NA	3.49
Missouri	5.01	NA	4.48	5.71	5.13	5.03	5.04	4.65
Montana	4.63	4.44	4.45	5.69	3.75	4.44	5.88	4.22
Nebraska	3.91	3.20	3.39	5.08	4.70	3.68	3.65	3.77
Nevada	4.62	4.55	5.92	5.43	3.95	4.39	3.66	4.68
New Hampshire	NA	4.23	4.94	NA	NA	NA	5.39	NA
New Jersey	3.95	3.86	3.34	4.48	^R 4.39	^R 3.96	^R 4.02	^R 3.33
New Mexico	3.23	NA	3.58	4.73	2.74	3.41	2.41	2.84
New York	NA	NA	4.57	4.88	4.97	5.30	NA	NA
North Carolina	4.52	3.33	4.06	5.12	4.24	3.61	4.21	4.71
North Dakota	4.27	2.56	2.99	4.76	4.68	13.05	3.21	3.07
Ohio	5.21	5.07	4.35	6.50	4.44	5.44	4.49	4.97
Oklahoma	4.71	3.58	3.76	5.32	5.38	4.58	4.46	4.48
Oregon	4.65	3.94	3.72	4.43	^R 4.36	8.19	4.38	4.46
Pennsylvania	NA	4.22	4.28	4.72	^R 4.85	NA	4.67	4.69
Rhode Island	4.69	3.99	4.01	5.64	5.42	4.77	4.67	5.34
South Carolina	4.32	3.03	3.48	5.14	5.15	4.10	4.01	3.94
South Dakota	3.58	3.17	3.34	4.25	4.03	3.83	3.39	3.52
Tennessee	NA	3.28	4.04	4.83	NA	4.25	4.33	4.32
Texas	NA	NA	2.46	NA	4.25	3.31	3.08	2.80
Utah	3.20	2.99	2.93	3.03	3.02	3.16	2.69	3.44
Vermont	4.22	2.80	2.91	4.41	4.52	3.98	3.98	4.01
Virginia	NA	3.78	4.09	5.15	4.70	4.74	NA	4.27
Washington	NA	NA	2.80	NA	NA	NA	NA	NA
West Virginia	4.59	NA	3.36	5.04	4.77	3.12	5.25	4.13
Wisconsin	4.51	3.72	3.91	5.68	5.43	4.02	4.45	4.26
Wyoming	NA	3.18	3.39	3.80	NA	NA	3.36	3.28
Total	3.83	2.98	3.33	4.46	^R4.32	^R3.76	^R3.65	^R3.54

See footnotes at end of table.

Table 23. Average Price of Natural Gas Sold to Industrial Consumers, by State, 1998-2000

(Dollars per Thousand Cubic Feet) — Continued

State	2000		1999					
	February	January	Total	December	November	October	September	August
Alabama	3.47	3.45	3.32	3.42	3.79	3.39	3.59	3.33
Alaska	1.41	1.40	1.25	1.37	1.34	1.29	1.16	1.33
Arizona	3.54	3.38	3.42	3.44	3.63	3.55	3.48	3.29
Arkansas	4.47	4.58	NA	4.69	3.96	4.84	4.89	3.92
California	4.45	3.82	NA	4.05	4.44	4.02	2.44	3.67
Colorado	2.81	NA	NA	2.53	3.30	2.83	3.12	2.96
Connecticut	5.53	5.36	4.18	4.93	4.63	4.16	3.92	3.82
Delaware	5.40	2.64	4.16	3.96	5.25	4.61	4.64	4.25
District of Columbia	—	—	—	—	—	—	—	—
Florida	4.40	4.06	3.99	4.18	4.42	3.86	4.35	4.20
Georgia	4.00	4.31	3.25	4.08	4.01	3.98	3.96	3.42
Hawaii	8.48	8.28	8.21	8.28	8.19	8.29	8.28	8.04
Idaho	3.50	3.54	3.30	3.55	3.51	3.29	3.23	3.22
Illinois	3.78	4.06	4.04	4.58	4.76	5.17	4.56	4.05
Indiana	5.68	3.60	NA	3.69	3.91	3.91	3.94	3.44
Iowa	3.88	4.14	3.96	5.03	4.95	4.63	4.59	3.96
Kansas	4.03	3.59	NA	3.48	3.75	3.38	2.82	2.62
Kentucky	4.07	3.87	3.30	4.12	3.65	3.34	3.36	3.26
Louisiana	2.92	2.77	2.53	2.90	3.04	2.83	3.02	2.76
Maine	5.16	4.60	4.92	4.98	4.92	4.60	4.44	4.58
Maryland	7.89	^R 5.67	5.54	6.14	5.62	5.38	6.78	4.48
Massachusetts	NA	NA	NA	NA	NA	NA	NA	5.50
Michigan	3.84	3.92	3.92	3.92	3.81	4.25	4.51	4.81
Minnesota	3.31	3.28	NA	NA	4.29	3.94	3.47	2.68
Mississippi	3.52	3.35	NA	3.21	3.80	3.39	3.63	3.36
Missouri	5.12	4.87	NA	4.99	4.41	4.41	4.13	3.92
Montana	4.51	4.40	4.55	4.40	4.44	5.29	5.71	6.07
Nebraska	^R 3.70	^R 3.51	3.39	3.59	4.10	3.63	3.68	3.50
Nevada	5.08	4.82	4.63	4.81	4.84	4.51	4.83	4.79
New Hampshire	7.70	7.03	4.56	8.34	5.74	3.79	3.78	3.66
New Jersey	^R 4.00	^R 3.55	^R 3.87	^R 4.04	^R 4.12	^R 3.51	^R 4.73	^R 3.22
New Mexico	2.79	3.44	NA	2.09	2.29	NA	NA	NA
New York	4.98	5.13	NA	4.94	4.95	4.95	4.84	NA
North Carolina	5.13	5.04	3.73	5.13	4.71	5.60	3.77	3.10
North Dakota	3.02	3.17	NA	NA	3.17	3.14	3.24	3.00
Ohio	5.39	5.38	NA	5.73	5.49	5.28	5.11	NA
Oklahoma	4.63	4.51	3.77	4.78	3.96	3.48	3.88	3.32
Oregon	4.31	4.39	4.01	4.31	4.19	3.94	4.08	4.01
Pennsylvania	4.96	5.20	4.21	4.56	4.28	4.12	3.97	3.83
Rhode Island	5.54	2.61	^R 4.01	4.96	4.60	4.62	4.19	2.61
South Carolina	4.16	4.03	3.32	3.52	4.08	3.68	3.74	3.45
South Dakota	3.46	3.37	3.36	3.77	3.69	3.76	3.85	3.51
Tennessee	^R 4.36	4.20	^R 3.45	^R 4.14	4.13	3.81	2.84	4.02
Texas	2.72	2.55	NA	2.51	2.94	2.77	2.83	2.71
Utah	3.39	3.45	3.02	3.69	3.04	2.90	2.93	2.85
Vermont	4.38	4.21	3.08	3.73	3.56	3.39	3.23	3.02
Virginia	4.09	4.85	3.91	4.57	5.83	3.50	3.39	2.92
Washington	NA	NA	NA	NA	NA	NA	NA	NA
West Virginia	4.53	4.88	NA	NA	3.91	3.25	3.58	3.42
Wisconsin	4.32	4.24	3.87	4.27	4.67	3.60	4.07	3.73
Wyoming	3.30	3.34	3.17	3.19	3.16	3.18	3.04	3.30
Total	^R3.67	^R3.49	^R3.13	^R3.25	^R3.59	^R3.32	^R3.28	^R3.05

See footnotes at end of table.

Table 23. Average Price of Natural Gas Sold to Industrial Consumers, by State, 1998-2000

(Dollars per Thousand Cubic Feet) — Continued

State	1999							1998
	July	June	May	April	March	February	January	Total
Alabama	3.06	3.15	3.30	3.24	3.05	3.34	3.24	3.30
Alaska	1.27	1.24	1.21	1.18	1.17	1.18	1.20	1.34
Arizona	3.26	3.62	3.11	3.26	3.71	3.42	3.48	3.26
Arkansas	3.64	NA	3.57	3.35	3.42	3.48	3.40	3.48
California	3.48	3.34	3.22	3.12	3.09	NA	4.02	3.77
Colorado	NA	2.41	2.46	2.28	2.16	2.32	2.41	2.61
Connecticut	3.54	3.70	3.70	3.98	4.23	4.39	4.49	4.34
Delaware	4.16	4.11	3.48	4.27	4.00	3.93	4.33	4.13
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.99	4.11	3.92	3.82	3.66	3.92	3.82	3.98
Georgia	4.11	3.46	3.11	2.78	2.76	2.64	2.55	3.92
Hawaii	8.04	8.31	8.52	8.02	8.10	8.07	8.41	—
Idaho	3.59	3.21	3.22	3.26	3.14	3.23	3.19	3.09
Illinois	4.17	4.03	3.85	3.17	3.50	3.71	3.81	3.96
Indiana	3.93	3.95	NA	NA	NA	3.01	NA	4.28
Iowa	2.30	6.02	3.52	3.27	3.33	3.52	3.32	3.49
Kansas	2.52	2.51	NA	2.97	2.98	3.25	NA	3.17
Kentucky	2.99	2.90	3.09	2.90	3.10	3.35	3.17	4.00
Louisiana	2.53	2.40	2.24	2.37	1.88	1.95	2.12	2.31
Maine	4.38	4.10	4.40	6.11	5.76	6.05	5.20	5.13
Maryland	5.74	6.00	6.39	3.80	4.15	6.65	6.20	5.26
Massachusetts	NA	NA	4.50	NA	NA	6.88	4.62	5.69
Michigan	5.11	4.46	3.83	3.69	3.76	3.66	3.92	3.91
Minnesota	2.87	2.60	3.07	2.52	2.67	2.81	2.86	2.88
Mississippi	3.09	3.09	3.18	NA	2.65	3.12	NA	3.22
Missouri	3.69	3.91	4.00	3.97	4.00	NA	4.74	4.51
Montana	5.67	5.99	4.33	4.79	4.79	4.78	3.40	4.68
Nebraska	3.16	3.41	3.14	3.05	3.21	3.12	3.35	3.26
Nevada	4.71	4.76	4.62	4.51	4.45	4.50	4.50	4.74
New Hampshire	3.49	3.69	^R 1.53	2.06	6.42	6.73	6.51	4.66
New Jersey	^R 3.29	^R 3.39	^R 3.06	^R 2.82	^R 4.54	^R 3.06	^R 6.38	2.97
New Mexico	3.39	3.35	3.36	NA	3.60	3.58	NA	3.22
New York	NA	NA	NA	NA	NA	NA	NA	4.02
North Carolina	3.03	3.22	3.07	3.09	3.79	3.60	3.63	3.96
North Dakota	2.73	2.59	2.77	2.37	2.47	2.53	2.66	2.82
Ohio	6.61	5.45	3.45	5.17	4.90	5.13	5.42	4.39
Oklahoma	3.48	3.45	4.73	3.28	3.50	3.50	3.45	3.66
Oregon	3.93	3.94	3.96	3.89	3.69	4.37	3.87	3.75
Pennsylvania	3.77	3.80	3.92	4.19	4.41	4.45	4.59	4.15
Rhode Island	^R 3.92	3.29	3.74	3.52	4.32	4.77	5.00	3.82
South Carolina	3.10	3.22	3.07	2.79	2.93	3.15	3.00	3.29
South Dakota	3.53	3.54	3.26	3.02	3.03	3.12	3.13	3.28
Tennessee	2.69	3.31	3.19	3.44	3.33	3.54	3.57	3.94
Texas	2.53	2.41	NA	2.14	1.98	2.04	2.12	2.35
Utah	2.85	2.86	2.92	2.99	3.31	3.16	2.85	3.00
Vermont	2.83	2.82	2.80	2.74	2.72	2.75	3.00	2.80
Virginia	3.39	3.49	3.40	3.13	3.76	3.88	5.07	4.07
Washington	NA	NA	NA	NA	NA	NA	NA	2.64
West Virginia	3.05	NA	2.68	NA	NA	2.82	2.40	3.39
Wisconsin	3.30	3.53	3.41	3.86	3.72	3.82	3.90	3.78
Wyoming	3.26	3.15	3.14	2.64	3.81	3.27	2.95	3.37
Total	^R3.00	^R2.97	^R2.68	^R2.82	^R3.03	^R2.98	^R3.32	3.14

^R Revised Data.

NA Not Available.

— Not Applicable.

Notes: Data for 1998 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. Average prices for gas delivered to industrial consumers

reflect onsystem sales prices only. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy. See Table 25 for data on onsystem sales expressed as a percentage of both total commercial and total industrial deliveries.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 24. Average Price of Natural Gas Delivered to Electric Utility^a Consumers, by State, 1998-2000

(Dollars per Thousand Cubic Feet)

State	YTD 2000	YTD 1999	YTD 1998	2000				
				June	May	April	March	February
Alabama	4.43	2.52	2.56	4.68	4.75	3.45	1.41	2.94
Alaska	1.67	1.65	1.85	1.63	1.74	1.75	1.63	1.64
Arizona	3.72	2.43	2.85	4.75	3.77	3.40	3.01	2.94
Arkansas	3.52	2.31	2.36	4.72	3.79	3.20	2.99	2.86
California	3.83	2.62	2.83	4.87	4.19	3.54	3.38	3.23
Colorado	3.18	2.67	2.69	3.96	3.48	3.08	2.86	2.78
Connecticut	—	2.49	2.54	—	—	—	—	—
Delaware	4.81	2.71	2.74	5.10	4.20	5.87	5.86	5.87
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.76	2.88	2.41	5.15	3.89	3.68	3.36	3.33
Georgia	4.08	2.30	3.08	4.19	3.93	3.89	3.41	11.20
Hawaii	—	—	—	—	—	—	—	—
Idaho	—	—	—	—	—	—	—	—
Illinois	3.82	2.21	2.37	5.11	3.64	3.57	3.11	3.14
Indiana	4.02	2.90	3.04	5.80	4.42	4.19	3.52	3.31
Iowa	3.75	3.06	3.09	5.25	3.81	3.43	3.26	3.19
Kansas	3.22	2.15	2.24	3.87	3.54	3.15	2.92	2.69
Kentucky	5.48	3.33	3.74	6.06	7.17	5.83	4.93	3.59
Louisiana	3.50	2.31	2.51	4.75	3.62	3.22	2.97	2.96
Maine	—	—	—	—	—	—	—	—
Maryland	4.28	2.88	3.08	4.95	4.16	3.69	3.35	3.72
Massachusetts	3.90	2.54	3.03	4.97	3.97	3.67	3.40	3.42
Michigan	2.68	1.51	1.03	3.17	2.85	3.16	3.19	2.06
Minnesota	3.55	2.54	2.61	4.28	3.54	3.27	3.13	3.56
Mississippi	3.39	2.25	2.43	4.44	3.76	3.17	2.84	2.94
Missouri	3.54	2.37	2.41	4.51	3.77	3.23	2.99	2.85
Montana	4.21	3.86	6.20	4.94	3.37	3.53	3.88	3.71
Nebraska	3.89	2.50	2.39	4.33	4.07	3.53	3.31	3.24
Nevada	3.33	2.36	2.40	4.19	3.56	3.03	2.90	2.69
New Hampshire	3.27	2.44	—	—	3.70	3.47	3.19	3.18
New Jersey	4.18	2.85	2.81	4.77	3.79	3.77	3.51	4.15
New Mexico	3.06	2.04	2.33	4.27	3.35	2.99	2.66	2.58
New York	4.02	2.62	2.77	4.82	3.97	3.55	3.47	4.20
North Carolina	4.05	2.87	2.83	4.27	3.70	3.82	4.28	4.35
North Dakota	—	—	—	—	—	—	—	—
Ohio	3.89	2.77	3.15	3.39	5.49	1.25	4.03	4.60
Oklahoma	3.65	2.53	2.76	4.67	3.73	3.30	3.20	3.44
Oregon	2.55	1.91	1.24	3.35	2.75	2.50	2.27	2.20
Pennsylvania	3.55	2.61	3.16	5.09	3.42	3.25	3.07	3.35
Rhode Island	—	—	3.37	—	—	—	—	—
South Carolina	5.26	3.45	3.74	5.36	5.03	4.39	4.07	7.47
South Dakota	—	—	—	—	—	—	—	—
Tennessee	—	—	—	—	—	—	—	—
Texas	3.32	2.23	2.41	4.40	3.50	3.06	2.83	2.73
Utah	3.33	2.37	1.94	3.79	3.45	3.13	2.96	2.83
Vermont	4.11	2.56	2.92	4.66	3.83	3.56	3.32	3.33
Virginia	3.97	3.07	3.22	5.48	4.09	4.00	3.21	4.01
Washington	—	—	2.79	—	—	—	—	—
West Virginia	3.96	2.99	3.56	4.19	3.75	4.19	4.10	3.07
Wisconsin	3.61	2.77	2.81	4.86	3.80	3.49	3.23	3.16
Wyoming	4.12	4.16	8.52	4.27	3.72	3.31	2.94	2.70
Total	3.45	2.38	2.50	4.46	3.61	3.22	2.99	2.95

See footnotes at end of table.

Table 24. Average Price of Natural Gas Delivered to Electric Utility^a Consumers, by State, 1998-2000

(Dollars per Thousand Cubic Feet) — Continued

State	2000	1999						
	January	Total	December	November	October	September	August	July
Alabama	4.94	2.82	3.72	3.09	3.95	3.64	2.28	3.26
Alaska	1.62	1.59	1.57	1.55	1.48	1.40	1.50	1.62
Arizona	2.64	2.67	2.62	3.04	2.96	3.03	2.84	2.56
Arkansas	2.84	2.60	2.60	2.56	2.90	3.06	2.96	2.58
California	2.83	2.76	2.74	3.00	2.98	3.19	3.00	2.71
Colorado	2.51	2.69	2.66	2.84	3.13	2.94	2.52	2.53
Connecticut	—	2.72	3.20	3.06	3.02	2.88	2.65	2.59
Delaware	3.61	2.91	3.81	3.70	3.34	3.35	3.06	2.72
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.03	3.10	2.95	3.56	3.22	3.54	3.33	2.98
Georgia	1.20	2.57	2.85	3.65	3.13	2.62	2.66	2.60
Hawaii	—	—	—	—	—	—	—	—
Idaho	—	—	—	—	—	—	—	—
Illinois	2.78	2.40	2.37	2.25	3.15	2.86	2.72	2.48
Indiana	3.29	2.98	3.26	4.05	4.56	4.04	2.86	2.82
Iowa	3.00	3.08	3.14	3.12	3.54	3.52	2.94	2.93
Kansas	2.56	2.37	2.57	2.87	2.81	2.73	2.60	2.31
Kentucky	3.17	3.20	2.93	4.25	3.45	3.33	3.26	2.88
Louisiana	2.71	2.58	2.49	3.09	2.87	3.07	2.91	2.55
Maine	—	—	—	—	—	—	—	—
Maryland	3.84	3.11	3.60	3.68	3.25	3.29	3.44	2.98
Massachusetts	2.98	2.71	3.39	2.88	3.10	2.99	2.99	2.73
Michigan	1.78	1.52	1.58	1.69	0.96	1.19	1.55	1.92
Minnesota	2.62	2.59	3.23	4.20	3.52	3.08	1.93	2.60
Mississippi	2.66	2.47	2.52	2.56	2.82	2.79	2.79	2.43
Missouri	2.75	2.64	2.78	3.00	3.06	2.81	2.91	2.54
Montana	4.13	4.02	1.39	1.44	2.48	5.15	6.14	4.20
Nebraska	2.87	2.74	3.05	4.18	2.89	3.05	3.24	2.59
Nevada	2.99	2.51	2.72	2.78	2.68	2.78	2.49	2.43
New Hampshire	—	2.87	—	—	—	3.02	3.02	2.43
New Jersey	4.98	3.08	3.69	3.08	3.35	3.24	3.37	2.97
New Mexico	2.47	2.31	2.39	2.40	2.58	2.69	2.68	2.30
New York	3.96	2.84	3.14	3.19	3.28	3.20	3.05	2.80
North Carolina	4.21	2.85	4.72	4.70	3.61	3.11	3.09	2.56
North Dakota	—	—	—	—	—	—	—	—
Ohio	3.46	3.04	4.20	3.11	3.11	2.91	2.98	3.34
Oklahoma	3.08	2.78	3.07	3.43	3.15	3.18	2.94	2.65
Oregon	2.22	1.96	2.20	2.26	2.00	1.83	1.66	1.78
Pennsylvania	3.24	3.02	3.08	3.15	3.09	2.95	3.12	3.40
Rhode Island	—	—	—	—	—	—	—	—
South Carolina	8.54	3.63	4.06	3.80	3.84	3.99	3.85	3.47
South Dakota	—	—	—	—	—	—	—	—
Tennessee	—	—	—	—	—	—	—	—
Texas	2.59	2.51	2.60	2.94	2.76	2.88	2.83	2.44
Utah	2.86	2.64	2.68	3.14	3.12	2.85	2.67	2.39
Vermont	3.09	3.23	2.92	3.78	2.17	3.25	3.31	—
Virginia	3.23	3.19	3.69	3.96	4.29	3.35	3.42	2.78
Washington	—	—	—	—	—	—	—	—
West Virginia	4.36	2.98	—	2.95	2.88	2.91	2.93	3.13
Wisconsin	3.22	2.93	2.97	3.44	3.29	3.45	2.99	2.90
Wyoming	2.82	3.88	1.98	2.39	3.95	5.75	4.59	3.14
Total	2.74	2.62	2.68	3.01	2.83	2.98	2.86	2.58

See footnotes at end of table.

Table 24. Average Price of Natural Gas Delivered to Electric Utility^a Consumers, by State, 1998-2000

(Dollars per Thousand Cubic Feet) — Continued

State	1999						1998	
	June	May	April	March	February	January	Total	December
Alabama	2.73	2.70	2.52	2.25	2.07	2.22	2.58	2.68
Alaska	1.59	1.61	1.60	1.72	1.70	1.68	1.80	1.72
Arizona	2.62	2.67	2.22	2.13	2.29	2.32	2.42	2.38
Arkansas	2.49	2.52	2.22	1.88	1.94	2.04	2.29	2.35
California	2.57	2.73	2.42	2.75	2.55	2.70	2.79	2.96
Colorado	3.18	2.60	2.25	2.18	2.24	3.26	2.98	3.33
Connecticut	2.52	2.50	2.54	2.12	2.02	2.11	2.44	1.90
Delaware	2.71	2.53	2.46	2.46	2.98	3.34	2.89	3.34
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.04	3.14	2.66	2.58	2.86	2.86	2.27	1.39
Georgia	2.47	2.58	2.13	1.37	2.15	4.83	3.21	2.11
Hawaii	—	—	—	—	—	—	—	—
Idaho	—	—	—	—	—	—	—	—
Illinois	2.44	2.36	2.20	1.86	1.81	2.27	2.25	2.12
Indiana	2.79	3.19	3.14	2.71	2.78	2.99	2.88	3.36
Iowa	2.97	3.01	2.78	3.13	3.45	3.56	3.07	3.38
Kansas	2.35	2.35	2.08	1.80	1.96	2.24	2.14	2.21
Kentucky	3.15	5.12	3.77	3.33	2.99	2.51	3.40	2.90
Louisiana	2.52	2.58	2.25	2.01	2.09	2.13	2.37	2.16
Maine	—	—	—	—	—	—	—	—
Maryland	2.88	3.27	2.55	2.60	3.46	3.52	2.75	2.64
Massachusetts	2.75	2.58	2.26	2.10	2.13	2.43	2.78	2.26
Michigan	1.79	1.74	1.09	0.88	1.33	2.07	1.24	1.25
Minnesota	2.48	2.32	2.31	2.56	3.49	3.02	2.36	3.43
Mississippi	2.43	2.45	2.30	1.91	1.95	2.05	2.31	1.97
Missouri	2.48	2.41	2.31	2.16	2.29	2.34	2.26	2.31
Montana	4.40	10.99	5.69	7.37	5.20	2.04	2.06	1.48
Nebraska	2.63	2.72	2.46	1.37	2.79	2.28	2.40	2.92
Nevada	2.46	2.43	2.55	2.07	2.40	2.20	2.38	2.01
New Hampshire	2.44	—	—	—	—	—	—	—
New Jersey	2.88	2.85	2.94	2.46	2.76	2.95	2.74	2.44
New Mexico	2.31	2.22	2.05	1.79	1.89	2.03	2.22	2.14
New York	2.72	2.71	2.49	2.37	2.55	2.80	2.57	2.43
North Carolina	2.70	2.71	3.31	3.32	3.33	3.34	2.81	3.93
North Dakota	—	—	—	—	—	—	—	—
Ohio	2.99	2.42	2.06	2.99	3.32	3.88	3.24	3.88
Oklahoma	2.59	2.66	2.58	2.28	2.55	2.44	2.48	2.28
Oregon	1.99	1.91	1.79	1.67	1.83	2.01	1.56	1.92
Pennsylvania	2.36	3.18	2.55	3.02	2.98	2.94	3.26	4.88
Rhode Island	—	—	—	—	—	—	3.38	—
South Carolina	3.70	3.46	2.94	3.02	2.86	3.00	3.62	4.05
South Dakota	—	—	—	—	—	—	1.77	—
Tennessee	—	—	—	—	—	—	—	—
Texas	2.40	2.44	2.17	1.99	2.09	2.10	2.30	2.24
Utah	2.43	2.36	2.36	2.56	2.19	2.24	2.11	2.45
Vermont	2.94	3.03	2.56	2.44	2.47	2.55	2.90	2.87
Virginia	3.39	2.89	2.79	3.09	3.12	3.18	3.10	4.03
Washington	—	—	—	—	—	—	3.44	—
West Virginia	3.08	2.81	3.12	2.96	2.93	3.19	3.29	3.02
Wisconsin	2.80	2.92	2.63	2.51	2.79	2.64	2.67	2.73
Wyoming	2.60	6.59	13.06	6.02	4.83	6.92	8.31	11.18
Total	2.53	2.57	2.29	2.15	2.26	2.32	2.40	2.22

^a Includes all steam electric utility generating plants with a combined capacity of 50 megawatts or greater.

— Not Applicable.

Notes: Data for 1998 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District

of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Sources: Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1998-2000

State	YTD 2000		YTD 1999		YTD 1998		2000	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	July	
							Commercial	Industrial
Alabama	78.0	15.5	72.3	15.7	82.8	24.5	73.6	14.4
Alaska	72.7	93.3	54.6	99.7	50.0	99.5	77.3	99.9
Arizona	82.6	37.7	83.9	34.0	86.1	32.8	81.9	33.3
Arkansas	NA	18.1	NA	NA	93.1	9.3	NA	23.3
California	57.1	5.7	58.5	10.3	57.6	10.4	51.7	4.5
Colorado	NA	NA	NA	NA	95.0	13.1	NA	NA
Connecticut	78.9	44.8	65.7	58.3	71.5	56.1	83.1	50.3
Delaware	98.2	11.1	100.0	19.8	100.0	24.6	98.7	3.2
District of Columbia	39.2	—	NA	—	55.0	—	28.6	—
Florida	64.5	2.8	91.5	3.5	96.9	7.2	60.3	3.2
Georgia	NA	NA	NA	13.3	87.2	28.2	15.8	31.7
Hawaii	100.0	100.0	100.0	100.0	100.0	—	100.0	100.0
Idaho	87.7	2.9	87.6	2.8	88.0	2.4	83.5	2.2
Illinois	41.4	8.4	43.5	8.8	50.1	9.3	26.2	5.6
Indiana	NA	7.3	NA	NA	81.8	10.4	68.4	7.9
Iowa	79.0	6.5	84.4	7.5	86.5	6.2	69.0	3.7
Kansas	77.2	9.2	NA	NA	73.0	10.3	79.6	18.9
Kentucky	85.4	14.2	87.6	16.3	88.4	17.5	79.8	13.7
Louisiana	NA	9.2	96.4	7.1	95.1	7.6	NA	9.6
Maine	NA	NA	100.0	83.0	100.0	88.3	NA	NA
Maryland	34.2	5.5	NA	5.2	39.4	6.2	27.1	8.7
Massachusetts	NA	NA	NA	NA	56.2	14.4	NA	NA
Michigan	58.6	7.8	60.3	9.9	62.0	9.1	36.6	4.8
Minnesota	NA	37.5	96.1	36.8	98.0	40.9	97.2	37.0
Mississippi	NA	NA	NA	NA	94.3	37.8	94.7	35.1
Missouri	80.8	15.4	79.1	19.9	82.0	19.8	67.5	10.4
Montana	79.1	2.1	79.1	1.6	79.5	1.7	74.7	—
Nebraska	59.9	14.6	63.8	20.5	76.5	12.9	67.1	6.0
Nevada	55.6	5.8	64.8	9.0	73.8	1.8	36.4	20.2
New Hampshire	NA	NA	NA	23.8	94.5	36.6	NA	NA
New Jersey	41.7	44.6	40.6	44.7	62.0	44.8	30.8	34.0
New Mexico	55.4	17.0	56.6	NA	66.2	9.1	49.0	20.5
New York	NA	NA	NA	NA	54.6	5.6	NA	22.5
North Carolina	95.9	50.1	94.3	44.4	92.2	34.2	100.0	65.3
North Dakota	NA	15.2	87.5	13.5	84.7	13.9	80.4	16.0
Ohio	41.7	2.8	46.4	2.5	57.7	4.9	29.9	1.2
Oklahoma	77.2	7.1	75.4	3.7	76.3	4.3	53.3	5.9
Oregon	99.2	12.7	98.8	15.0	99.1	15.3	98.9	15.7
Pennsylvania	NA	NA	57.7	11.8	57.5	13.6	68.6	11.9
Rhode Island	56.9	9.7	57.0	6.5	61.9	7.5	42.3	100.0
South Carolina	98.8	84.4	96.7	84.4	98.4	86.3	100.0	85.6
South Dakota	80.9	34.3	82.2	41.6	84.2	35.7	72.7	14.2
Tennessee	NA	NA	85.5	25.6	89.5	35.1	84.7	27.2
Texas	NA	NA	76.9	NA	81.7	14.2	NA	NA
Utah	84.2	9.7	83.0	10.0	82.8	8.1	77.9	94.3
Vermont	100.0	83.8	100.0	76.6	100.0	100.0	100.0	81.0
Virginia	67.2	NA	66.1	11.6	74.0	13.1	63.6	12.6
Washington	NA	NA	NA	NA	87.0	19.4	NA	NA
West Virginia	53.0	2.6	49.5	NA	51.8	6.2	31.3	2.3
Wisconsin	80.5	18.4	75.5	21.3	76.3	22.9	66.2	15.0
Wyoming	90.8	NA	91.1	NA	89.6	1.9	93.9	NA
Total	65.2	15.8	65.8	15.8	69.5	15.7	60.2	15.7

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1998-2000 — Continued

State	2000							
	June		May		April		March	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	71.6	14.2	75.4	13.9	73.7	16.5	76.3	14.9
Alaska	81.7	99.9	68.1	99.8	73.7	99.9	74.8	99.8
Arizona	82.5	38.6	80.6	32.8	81.5	38.3	82.7	38.7
Arkansas	NA	20.8	NA	18.7	NA	18.1	NA	15.4
California	57.3	5.1	55.3	5.5	56.5	6.2	58.7	6.1
Colorado	NA	NA	NA	NA	NA	NA	NA	NA
Connecticut	80.7	45.4	79.4	53.2	77.1	30.6	79.4	45.9
Delaware	98.3	9.6	98.6	7.3	98.6	11.0	97.2	17.2
District of Columbia	28.0	—	30.0	—	34.2	—	37.4	—
Florida	61.7	4.3	63.5	3.7	64.4	4.1	65.8	3.2
Georgia	NA	NA	19.2	36.6	15.0	30.5	15.8	29.4
Hawaii	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Idaho	85.0	1.9	82.8	2.3	88.1	2.8	87.7	3.6
Illinois	25.9	4.9	32.5	4.6	40.4	7.4	44.1	8.0
Indiana	NA	6.3	72.0	5.7	79.6	8.0	80.0	8.4
Iowa	66.2	7.1	51.6	4.7	77.1	5.5	83.8	8.7
Kansas	80.4	13.5	82.3	8.4	80.2	6.0	74.9	7.6
Kentucky	76.3	15.6	77.3	14.3	84.2	14.2	84.5	14.2
Louisiana	96.0	9.4	96.1	8.2	96.8	8.2	95.2	8.2
Maine	NA	NA	NA	NA	100.0	55.1	NA	57.1
Maryland	22.9	4.4	27.2	5.7	27.5	1.4	35.1	6.1
Massachusetts	NA	NA	NA	NA	NA	NA	NA	NA
Michigan	41.6	5.8	50.8	7.2	56.0	9.3	61.0	10.1
Minnesota	96.3	24.9	98.3	59.6	96.1	39.6	95.9	38.9
Mississippi	92.1	46.3	93.7	45.9	NA	NA	96.0	42.7
Missouri	68.9	10.8	74.8	12.1	78.9	15.3	81.7	16.4
Montana	70.4	—	74.5	0.1	77.0	0.1	81.9	0.2
Nebraska	47.8	11.4	53.1	17.2	55.7	15.1	58.9	17.0
Nevada	46.0	14.0	48.0	16.2	53.6	19.2	60.6	26.5
New Hampshire	NA	NA	NA	NA	85.7	38.2	NA	NA
New Jersey	^R 43.7	^R 31.3	^R 70.4	^R 26.9	^R 41.4	^R 26.3	^R 41.3	^R 26.5
New Mexico	44.2	21.3	53.5	17.4	29.9	12.7	61.4	14.0
New York	53.7	17.4	NA	16.4	NA	NA	NA	NA
North Carolina	100.0	66.8	100.0	62.2	99.8	59.6	91.6	27.9
North Dakota	82.8	5.0	82.4	12.8	72.0	13.3	89.4	18.3
Ohio	26.2	1.4	38.6	1.6	41.7	2.2	39.7	2.6
Oklahoma	76.2	4.8	65.7	7.3	74.2	7.7	77.4	8.3
Oregon	99.1	^R 16.7	99.1	9.2	99.1	16.7	99.2	19.4
Pennsylvania	62.4	^R 10.2	NA	NA	57.1	10.0	59.9	9.1
Rhode Island	46.7	100.0	61.2	100.0	49.5	100.0	60.7	100.0
South Carolina	100.0	85.4	100.0	87.2	100.0	87.2	95.6	80.1
South Dakota	73.5	18.8	79.1	31.6	95.7	44.1	68.6	45.5
Tennessee	NA	NA	89.4	28.3	90.7	25.8	92.8	24.5
Texas	80.6	19.9	81.9	16.5	80.1	17.3	81.1	20.0
Utah	77.9	95.1	77.0	94.4	79.4	92.0	84.2	94.9
Vermont	100.0	92.4	100.0	82.0	100.0	81.5	100.0	80.8
Virginia	61.4	10.9	60.6	15.6	64.8	NA	65.1	18.8
Washington	NA	NA	NA	NA	NA	NA	NA	NA
West Virginia	34.4	2.2	46.1	2.1	49.3	2.7	48.1	2.8
Wisconsin	68.3	15.5	73.6	11.8	79.1	18.9	81.4	19.3
Wyoming	96.3	NA	90.5	NA	93.3	1.5	87.5	2.2
Total	^R 62.2	15.5	^R 64.3	14.7	^R 64.4	15.5	^R 64.2	^R 15.8

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1998-2000 — Continued

State	2000				1999			
	February		January		Total		December	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	83.6	18.1	79.5	17.0	64.4	15.1	62.9	15.1
Alaska	71.1	99.8	69.6	99.8	56.6	99.1	62.2	97.5
Arizona	83.1	40.8	84.5	42.0	82.7	36.6	81.8	43.9
Arkansas	NA	14.8	NA	17.1	NA	NA	100.0	16.7
California	59.8	7.0	58.0	6.4	55.5	8.5	56.5	9.0
Colorado	NA	0.4	NA	NA	NA	NA	96.5	0.3
Connecticut	80.8	52.9	73.9	43.3	62.7	55.8	62.2	52.2
Delaware	98.2	11.8	98.2	14.5	100.0	16.4	100.0	12.4
District of Columbia	49.3	—	48.9	—	NA	—	—	—
Florida	67.6	2.5	65.8	3.8	91.2	3.1	90.8	3.2
Georgia	13.5	31.8	8.8	26.3	NA	14.4	7.8	23.5
Hawaii	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Idaho	89.1	3.7	89.5	3.3	86.0	2.7	85.6	2.5
Illinois	45.5	9.9	44.8	10.7	41.6	8.2	42.0	9.0
Indiana	81.7	6.7	NA	9.3	NA	NA	NA	7.5
Iowa	84.2	8.0	85.6	8.4	83.1	^R 7.5	83.4	8.8
Kansas	77.1	5.0	72.6	4.3	NA	NA	58.5	4.6
Kentucky	88.5	12.2	87.8	15.5	86.9	16.6	89.2	18.1
Louisiana	96.6	7.9	93.8	8.2	96.0	7.6	93.7	7.6
Maine	100.0	55.1	100.0	56.3	100.0	81.2	100.0	80.4
Maryland	41.2	7.1	38.9	^R 8.8	NA	5.1	35.6	5.8
Massachusetts	NA	NA	NA	NA	NA	NA	NA	NA
Michigan	64.5	13.8	63.7	12.5	58.2	8.2	62.7	10.1
Minnesota	95.1	34.2	NA	39.7	95.5	NA	95.2	NA
Mississippi	96.7	46.6	98.8	29.3	NA	NA	95.6	32.1
Missouri	85.5	17.1	83.3	23.1	77.1	18.1	79.1	22.2
Montana	82.9	0.2	79.7	0.2	79.8	1.7	85.5	2.7
Nebraska	66.0	^R 19.1	61.9	^R 20.0	65.9	19.4	69.3	27.1
Nevada	62.5	26.9	67.3	31.4	62.0	8.4	66.1	30.1
New Hampshire	94.9	32.7	93.9	28.0	NA	^R 25.8	92.4	30.6
New Jersey	^R 42.4	^R 23.4	^R 38.1	^R 26.1	^R 41.2	^R 45.3	^R 45.4	^R 24.0
New Mexico	62.7	13.9	63.8	9.0	57.6	NA	65.5	20.3
New York	NA	33.6	NA	46.0	NA	NA	NA	27.3
North Carolina	93.1	40.2	97.2	30.8	93.4	44.3	89.8	24.9
North Dakota	89.2	25.7	NA	22.8	NA	NA	NA	NA
Ohio	45.2	3.5	45.5	3.4	NA	NA	46.3	2.7
Oklahoma	83.4	9.1	84.3	9.4	73.3	3.7	79.0	6.2
Oregon	99.4	19.9	99.4	18.3	98.8	13.7	99.1	11.7
Pennsylvania	59.8	9.5	60.1	10.5	56.1	11.2	59.7	11.8
Rhode Island	62.7	100.0	57.1	100.0	53.1	6.5	70.0	27.3
South Carolina	99.8	82.6	98.0	80.3	96.7	84.5	95.3	82.4
South Dakota	84.6	44.8	85.2	48.2	81.2	36.9	83.4	40.8
Tennessee	91.9	^R 24.7	95.3	26.0	85.4	^R 25.7	91.5	^R 24.4
Texas	86.1	19.2	74.2	25.3	75.7	NA	77.6	39.7
Utah	88.6	94.5	87.1	93.2	82.9	9.8	86.9	6.9
Vermont	100.0	83.0	100.0	87.4	100.0	75.9	100.0	80.3
Virginia	69.1	17.1	74.2	20.7	65.8	11.0	71.8	13.2
Washington	NA	NA	NA	NA	NA	NA	NA	NA
West Virginia	71.0	2.7	57.3	3.5	NA	NA	NA	NA
Wisconsin	83.5	20.6	84.0	22.6	75.4	20.6	80.5	23.0
Wyoming	92.8	1.7	87.7	1.0	88.2	NA	85.9	2.3
Total	^R 68.2	^R 16.6	^R 66.9	^R 17.2	^R 64.1	^R 17.1	^R 65.0	^R 21.2

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1998-2000 — Continued

State	1999							
	November		October		September		August	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	51.5	14.3	45.0	14.1	48.8	14.4	47.0	14.2
Alaska	61.9	97.6	54.8	97.4	56.7	100.0	55.9	99.9
Arizona	81.8	46.3	79.0	39.0	78.6	40.8	78.7	34.1
Arkansas	NA	10.3	NA	13.1	NA	9.9	86.7	8.2
California	52.8	7.6	53.9	8.0	49.9	10.6	37.8	7.5
Colorado	96.3	0.4	NA	0.5	92.8	1.8	NA	2.9
Connecticut	58.3	53.2	56.5	54.5	51.9	59.3	51.6	54.7
Delaware	100.0	13.4	100.0	9.1	100.0	10.1	100.0	15.3
District of Columbia	43.8	—	36.8	—	32.4	—	31.7	—
Florida	87.2	2.8	91.5	2.8	92.7	2.4	92.4	2.8
Georgia	9.1	16.4	12.1	16.8	33.0	11.1	67.8	21.2
Hawaii	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Idaho	82.5	2.5	79.0	2.1	80.4	2.1	82.0	3.4
Illinois	38.3	8.4	38.6	6.3	34.5	7.2	24.5	5.1
Indiana	NA	6.3	63.4	7.4	63.4	7.6	62.5	4.9
Iowa	82.9	7.2	79.4	7.3	71.6	7.2	75.0	7.1
Kansas	52.7	7.7	57.6	7.7	64.4	14.5	53.7	14.9
Kentucky	84.7	15.6	83.0	18.1	82.6	15.7	79.5	16.9
Louisiana	96.2	9.3	95.4	8.0	95.8	8.4	96.4	7.9
Maine	100.0	87.1	100.0	77.5	100.0	76.4	100.0	74.5
Maryland	28.6	8.2	25.5	4.3	23.6	4.2	24.3	4.0
Massachusetts	NA	NA	NA	NA	NA	NA	NA	38.3
Michigan	56.3	8.7	48.7	5.9	40.1	4.9	32.0	4.4
Minnesota	91.9	40.3	98.1	44.5	96.3	37.4	89.4	34.3
Mississippi	95.0	34.1	93.5	33.2	94.0	34.5	93.8	33.0
Missouri	70.9	16.1	69.3	12.9	64.7	12.7	65.5	11.7
Montana	82.0	2.6	80.3	1.5	75.3	0.8	68.5	0.5
Nebraska	69.0	23.7	78.4	17.2	60.2	13.7	86.4	12.5
Nevada	56.3	24.5	54.6	24.5	50.2	16.8	50.7	17.1
New Hampshire	93.4	31.4	90.6	28.5	89.6	27.5	88.2	26.3
New Jersey	^R 41.3	^R 21.0	^R 41.2	^R 23.8	^R 43.7	^R 25.1	^R 38.6	^R 15.9
New Mexico	65.4	19.0	60.2	NA	49.4	NA	40.9	NA
New York	NA	26.7	NA	27.8	NA	29.0	NA	NA
North Carolina	98.7	55.4	84.1	31.0	99.2	63.7	87.0	48.9
North Dakota	NA	12.7	88.9	26.5	82.6	12.0	77.9	11.6
Ohio	36.9	1.7	36.5	1.5	31.6	1.0	NA	NA
Oklahoma	71.7	3.4	63.8	2.9	53.9	3.4	60.6	2.5
Oregon	99.0	12.0	98.2	12.0	98.3	12.2	98.5	11.8
Pennsylvania	52.6	11.3	46.9	9.9	49.2	9.3	45.2	9.4
Rhode Island	34.9	27.4	43.6	26.8	39.9	24.7	16.4	36.2
South Carolina	100.0	88.4	93.4	82.3	99.9	88.1	94.6	81.7
South Dakota	80.4	37.5	75.6	25.5	71.5	26.2	69.8	20.3
Tennessee	89.7	23.3	78.7	26.6	80.7	32.7	76.1	21.3
Texas	69.4	25.4	72.3	28.6	72.8	25.6	74.4	37.2
Utah	82.8	11.4	79.9	11.0	75.4	9.8	74.4	9.2
Vermont	100.0	77.1	100.0	75.2	100.0	69.8	100.0	66.5
Virginia	65.7	12.3	61.2	11.8	59.3	10.1	57.7	5.4
Washington	NA	NA	NA	NA	NA	NA	NA	NA
West Virginia	47.0	7.1	39.6	13.0	32.5	12.8	26.4	12.4
Wisconsin	73.9	20.1	71.6	20.7	68.4	16.2	69.1	15.8
Wyoming	81.2	2.2	82.2	3.2	83.9	2.3	65.7	2.7
Total	^R 62.1	^R 17.5	^R 59.5	^R 17.7	^R 58.7	^R 17.9	^R 54.3	^R 19.3

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1998-2000 — Continued

State	1999							
	July		June		May		April	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	50.9	14.7	53.4	15.3	67.4	15.0	76.0	15.2
Alaska	56.3	98.4	57.4	100.0	58.9	99.9	53.5	99.9
Arizona	83.0	35.6	82.1	37.2	82.5	42.3	82.5	30.5
Arkansas	83.6	7.9	NA	NA	NA	8.6	89.6	8.7
California	52.6	8.8	60.7	10.1	49.8	11.6	61.3	12.7
Colorado	92.1	NA	95.8	0.6	96.7	0.6	NA	0.8
Connecticut	55.4	54.7	56.8	62.3	53.6	55.2	72.9	64.0
Delaware	100.0	15.1	100.0	16.4	100.0	22.4	100.0	17.6
District of Columbia	NA	—	33.9	—	39.4	—	43.5	—
Florida	92.4	2.7	94.0	3.2	91.6	4.2	92.0	3.4
Georgia	66.6	15.5	67.8	10.9	NA	13.9	82.0	17.1
Hawaii	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Idaho	83.7	2.8	83.3	2.8	85.5	2.3	87.0	2.6
Illinois	26.3	5.3	33.7	6.7	34.9	6.6	40.9	10.3
Indiana	52.3	8.1	70.4	8.0	73.2	NA	74.8	NA
Iowa	72.2	7.1	76.4	5.9	93.5	5.9	77.2	R7.3
Kansas	52.3	12.4	55.9	6.6	68.4	NA	69.1	4.9
Kentucky	79.7	16.1	80.4	12.9	84.4	16.5	83.9	16.3
Louisiana	96.1	7.3	97.1	6.7	96.6	6.6	97.2	6.5
Maine	100.0	72.0	100.0	87.9	100.0	74.6	100.0	75.1
Maryland	23.9	3.9	23.3	4.9	NA	3.4	25.1	1.6
Massachusetts	NA	NA	44.2	NA	54.1	41.5	46.8	NA
Michigan	37.5	4.5	39.5	4.9	47.1	7.2	58.0	14.2
Minnesota	96.7	36.7	92.1	43.8	96.6	29.3	91.7	37.1
Mississippi	94.1	33.4	94.4	35.2	95.8	38.1	NA	NA
Missouri	47.4	11.0	71.0	13.6	75.8	14.0	81.4	17.2
Montana	70.1	1.0	67.9	0.4	75.6	1.7	77.3	1.7
Nebraska	68.6	9.0	63.2	18.1	66.9	22.4	65.0	24.9
Nevada	51.1	18.1	55.6	18.7	60.2	18.7	63.2	25.4
New Hampshire	86.6	26.3	89.4	23.2	NA	R22.2	94.2	27.2
New Jersey	R40.1	R26.1	R37.4	R26.2	R34.3	R25.7	R38.5	R28.3
New Mexico	48.7	5.7	54.3	5.9	41.6	4.9	58.5	NA
New York	NA	NA	NA	NA	NA	NA	NA	NA
North Carolina	87.4	56.1	88.0	49.9	89.9	50.0	90.7	42.0
North Dakota	79.6	10.9	77.0	16.4	85.3	6.0	86.8	14.5
Ohio	30.8	0.6	30.1	1.1	34.5	1.8	38.7	2.0
Oklahoma	57.6	2.3	24.2	2.3	68.1	3.0	75.7	3.5
Oregon	98.8	12.2	98.5	14.1	98.7	14.1	98.7	15.1
Pennsylvania	53.6	10.7	50.3	11.0	59.1	11.8	56.1	11.1
Rhode Island	44.1	R27.4	46.8	32.0	48.9	31.4	56.2	38.8
South Carolina	94.7	87.0	94.9	81.2	95.4	86.1	96.3	85.5
South Dakota	73.9	20.7	60.2	33.2	78.7	38.8	83.2	41.8
Tennessee	74.1	28.3	76.7	27.0	77.6	26.4	85.8	21.8
Texas	72.5	22.2	72.4	21.4	74.4	NA	75.7	20.5
Utah	76.0	8.7	72.9	14.8	80.1	8.7	83.0	8.0
Vermont	100.0	68.6	100.0	68.7	100.0	68.8	100.0	76.3
Virginia	62.5	9.4	56.6	6.8	60.4	9.4	55.7	9.3
Washington	NA	NA	NA	NA	NA	NA	NA	NA
West Virginia	33.9	12.2	31.6	NA	35.8	11.8	51.4	NA
Wisconsin	65.7	18.8	62.9	19.9	62.8	18.3	70.9	21.3
Wyoming	82.0	3.3	83.8	3.6	87.5	3.6	88.6	2.5
Total	R57.3	R15.9	R59.2	R15.6	R59.9	R16.7	R63.5	R15.8

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1998-2000 — Continued

State	1999						1998	
	March		February		January		Total	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	76.3	15.9	77.4	16.1	81.0	18.4	80.5	23.3
Alaska	57.5	99.9	53.8	99.9	59.8	99.9	49.6	99.4
Arizona	84.6	26.3	84.6	34.0	86.3	32.3	85.0	33.5
Arkansas	90.1	9.6	91.4	10.6	93.3	11.7	90.8	9.5
California	59.5	13.4	59.1	14.4	62.3	11.8	48.9	10.4
Colorado	96.7	0.4	93.2	0.3	97.1	0.1	94.3	7.6
Connecticut	67.4	58.6	69.7	67.0	69.6	60.4	68.7	55.8
Delaware	100.0	22.7	100.0	24.0	100.0	18.1	100.0	22.4
District of Columbia	53.8	—	52.4	—	58.2	—	52.3	—
Florida	90.2	4.2	90.9	4.0	91.5	3.6	96.6	7.3
Georgia	83.0	13.5	81.6	11.3	85.4	10.1	83.6	25.3
Hawaii	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Idaho	87.8	2.8	88.8	3.1	89.4	3.6	86.4	2.6
Illinois	47.7	9.1	46.1	10.0	46.9	10.9	47.4	9.3
Indiana	NA	NA	^R 74.4	9.2	79.9	NA	79.2	9.3
Iowa	87.3	7.5	84.7	8.0	86.7	9.2	85.8	6.8
Kansas	NA	5.0	NA	5.4	NA	NA	69.5	9.9
Kentucky	88.8	16.6	89.2	18.0	90.3	16.9	87.5	17.8
Louisiana	96.2	7.5	95.9	7.8	96.2	7.5	94.6	9.3
Maine	100.0	80.7	100.0	97.3	100.0	93.8	100.0	87.4
Maryland	NA	10.7	NA	6.5	39.3	7.7	36.7	7.0
Massachusetts	67.0	NA	NA	32.3	78.5	28.3	57.9	26.3
Michigan	63.3	16.2	64.5	17.3	67.3	16.2	59.7	10.8
Minnesota	96.5	39.3	96.5	33.8	96.6	37.9	97.6	39.7
Mississippi	88.4	34.9	96.9	38.2	NA	NA	94.8	37.6
Missouri	83.3	24.6	79.1	33.9	85.5	26.3	78.3	18.2
Montana	78.1	1.8	80.1	1.7	83.5	2.4	77.1	1.5
Nebraska	67.6	23.8	63.5	28.7	59.8	23.5	72.5	12.7
Nevada	67.7	28.0	69.2	30.9	72.6	31.4	70.3	15.5
New Hampshire	94.5	19.6	95.3	24.1	95.5	24.2	94.1	30.7
New Jersey	^R 41.7	^R 28.1	^R 41.2	^R 28.9	^R 43.4	^R 28.7	60.5	49.5
New Mexico	58.1	4.2	52.8	3.6	66.7	NA	67.0	9.8
New York	NA	NA	NA	NA	NA	NA	53.2	8.3
North Carolina	97.0	37.6	96.6	36.4	97.0	41.1	90.6	32.1
North Dakota	89.7	13.7	83.6	13.6	92.4	18.4	83.8	14.6
Ohio	48.5	3.6	47.1	3.6	57.0	4.1	55.1	4.3
Oklahoma	79.2	4.3	78.9	5.1	83.2	5.7	73.2	3.6
Oregon	98.7	16.5	99.0	15.8	99.1	16.9	99.0	14.3
Pennsylvania	61.4	12.5	56.4	11.1	66.5	14.6	56.9	13.1
Rhode Island	60.4	50.1	61.5	30.8	59.4	24.4	59.3	7.4
South Carolina	97.4	83.3	97.8	83.0	97.6	84.8	97.9	86.7
South Dakota	84.3	47.4	84.1	50.0	86.6	51.8	84.2	35.6
Tennessee	83.9	27.4	84.8	23.3	92.6	25.4	87.3	33.1
Texas	78.2	16.3	81.3	13.0	71.0	14.6	81.0	14.1
Utah	82.8	8.3	85.7	10.8	85.8	12.2	82.5	8.6
Vermont	100.0	82.2	100.0	81.5	100.0	81.4	100.0	100.0
Virginia	65.8	17.5	68.2	15.4	76.4	18.0	72.1	12.8
Washington	NA	NA	NA	NA	NA	NA	86.8	20.1
West Virginia	54.2	NA	54.8	10.1	49.9	5.4	49.5	6.3
Wisconsin	76.6	21.9	78.8	22.7	80.6	25.4	74.0	22.0
Wyoming	88.1	2.6	97.4	NA	96.5	3.3	90.5	2.0
Total	^R 66.8	^R 15.8	^R 67.4	^R 15.3	^R 71.3	^R 15.7	67.0	16.1

^R Revised Data.

NA Not Available.

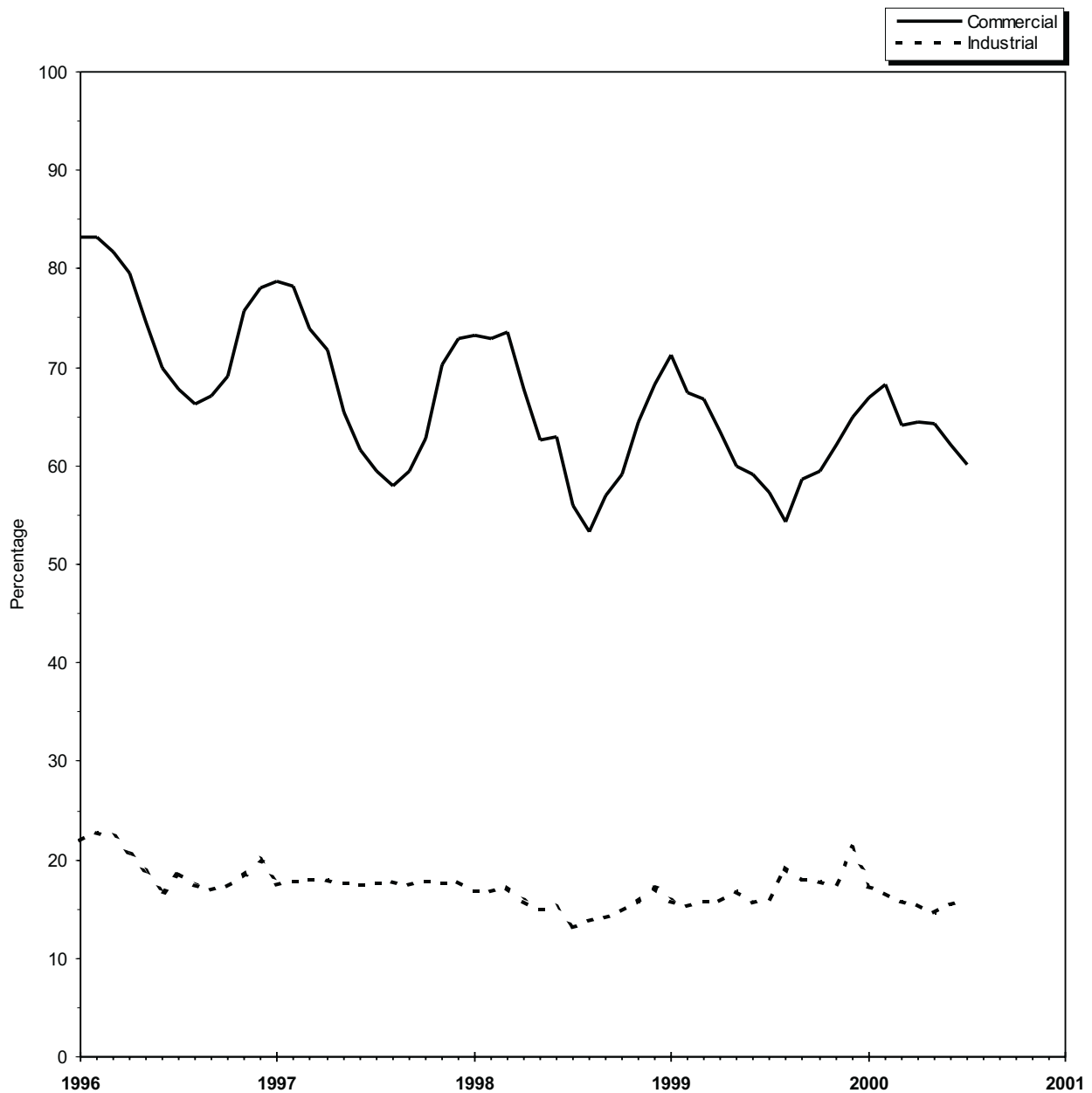
— Not Applicable.

Notes: Volumes of natural gas reported for the commercial and industrial sectors in this publication include data for both sales and deliveries for the account of others. This table shows the percent of the total State volume that represents natural gas sales to the commercial and

industrial sectors. This information may be helpful in evaluating commercial and industrial price data which are based on sales data only. See Appendix C, Statistical Considerations, for a discussion of the computation of natural gas prices.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Figure 6. Percentage of Total Deliveries Represented by Onsystem Sales, 1996-2000



Sources: Energy Information Administration, Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers" and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Appendix A

Explanatory Notes

The Energy Information Administration (EIA) publishes monthly data for the supply and disposition of natural gas in the United States in the *Natural Gas Monthly* (NGM). The information in this Appendix is provided to assist users in evaluating the monthly data. There is a brief description of what data are estimated and what data are taken from submitted reports, followed by ten technical notes that provide important information for individual data series.

The monthly data are preliminary when initially published. Data shown in this report for the most current months are taken from the EIA Short-Term Integrated Forecasting System (STIFS) model computations. Each month, EIA staff review the STIFS model estimates and adjust them, if necessary, based on their knowledge of new developments in the natural gas industry. Data for prior months are estimated or taken from submitted reports.

Table A1. Methodology for Reporting Initial Monthly Natural Gas Supply and Disposition Data

Components	Reporting Methodology
Supply and Disposition	
Marketed Production	Reported on Form EIA-895 and Estimated from Historical Data
Extraction Loss	Derived from Marketed Production
Dry Production	Marketed Production minus Extraction Loss
Withdrawals from Storage	Reported on Form EIA-191
Supplemental Gaseous Fuels	Derived from Supply Estimates and Coal Gasification Information
Imports	Estimated from National Energy Board of Canada Information and Liquefied Natural Gas Information
Additions to Storage	Reported on Form EIA-191
Exports	Estimated from Industry Trends and Liquefied Natural Gas Information
Current-Month Consumption	Estimated from Historical Month-to-Month Percent Changes
Consumption by Sector	
Lease and Plant Fuel	Derived from Marketed Production
Pipeline Fuel	Derived from Estimates for Lease and Plant Fuel and Deliveries to Consumers
Residential	Estimated from Reports to the Sample Survey Form EIA-857
Commercial	Estimated from Reports to the Sample Survey Form EIA-857
Industrial	Estimated from Reports to the Sample Survey Form EIA-857
Electric Utilities	Reported on Form EIA-759

For data that are not taken from STIFS computations, Table A1 below lists the methodologies for deriving the monthly data to be published.

The STIFS model contains a series of calculations that produce forecasts for all of the energy industry. It is driven primarily by three sets of inputs or assumptions: estimates of key macroeconomic variables, world oil price assumptions, and assumptions about the severity of weather. The natural gas estimates also reflect other key inputs or assumptions including gas wellhead prices, electric power generation by other energy sources, and U.S. gas import capacity. The macroeconomic variable estimates are produced by DRI/McGraw-Hill but are adjusted by EIA to reflect EIA assumptions about the world price of oil, energy product prices, and other assumptions which may affect the macroeconomic outlook. The EIA publishes forecasts for the energy industry each quarter in the *Short-Term Energy Outlook*.

For production, total supply and disposition, and storage data (Tables 1, 2, and 9), the most current two months shown are estimates produced from STIFS computations, and data that are two months or more prior to the date of publication are estimated or taken from submitted reports. For example, in the March issue of the NGM, February and March data are taken from the STIFS model computations while January and prior months data are estimated from available data sources or reported directly on EIA forms. For consumption data by sector (Table 3), the most current three months shown are estimates produced from STIFS computations while data that are three months prior to date of publication are taken from EIA forms.

Note 1. Nonhydrocarbon Gases Removed

Annual Data

Data on nonhydrocarbon gases removed from marketed production—carbon dioxide, helium, hydrogen sulfide, and nitrogen—are reported by State agencies on the voluntary Form EIA-895. For 1995, of the 33 producing States, 22 reported data on nonhydrocarbon gases removed. The 22 States accounted for 60 percent of total 1995 gross withdrawals. Of the 22 States reporting nonhydrocarbon gases removed, 11 reported zero values: Alaska, Arizona, Arkansas, Colorado, Illinois, Maryland, Missouri, Nevada, New York, South Dakota, and Virginia. The ten States reporting volumes greater than zero are

Alabama, California, Florida, Kentucky, Mississippi, Nebraska, New Mexico, North Dakota, Texas, and Wyoming. In addition, Kansas, Louisiana, Montana, and Oklahoma, which together accounted for 40 percent of gross withdrawals, did not report nonhydrocarbon gases removed separately. However, their gross withdrawal data excluded all or most of the nonhydrocarbon gases removed on leases. No estimates are made for States not reporting nonhydrocarbon gases removed.

Preliminary Monthly Data

All monthly data are considered preliminary until after publication of the *Natural Gas Annual* for the year in which the report month falls. Seven States report monthly data on nonhydrocarbon gases removed: Alabama, Arizona, Mississippi, New Mexico, North Dakota, Oregon and Texas. Monthly data for California, Colorado, Florida, and Wyoming are estimated based on annual data reported on Form EIA-895. Nonhydrocarbon gases as an annual percentage of gross withdrawals reported by each of the six States is applied to each State's monthly gross withdrawal data to produce an estimate of nonhydrocarbon gases removed.

Final Monthly Data

Beginning with report year 1990, States filing the Form EIA-627, "Annual Quantity and Value of Natural Gas Report," were asked to supply monthly breakdowns of all data previously reported on an annual basis. The sums of the reported figures were used to calculate monthly volumes. In 1997 the Form EIA-627 was discontinued. States were requested to file an annual schedule on the monthly Form EIA-895, "Monthly Quantity and Value of Natural Gas Report."

For States not supplying monthly data on the annual schedule of the EIA-895, final monthly data are calculated by proportionally allocating the differences between total annual data reported on the Form EIA-895 and the sum of monthly data (January-December).

Note 2. Supplemental Gaseous Fuels

Annual Data

Annual data are published from Form EIA-176.

Preliminary Monthly Data

All monthly data are considered preliminary until after the publication of the *Natural Gas Annual* for the year in which the report month falls. Monthly estimates are based on the annual ratio of supplemental gaseous fuels to the sum of dry gas production, net imports, and net withdrawals from storage. This ratio is applied to the monthly sum of these three elements to compute a monthly supplemental gaseous fuels figure.

Final Monthly Data

Monthly data are revised after publication of the *Natural Gas Annual*. Final monthly data are estimated based on the revised annual ratio of supplemental gaseous fuels to the sum of dry gas production, net imports, and net withdrawals from storage. This ratio is applied to the revised monthly sum of these three elements to compute final monthly data.

Note 3. Production

Annual Data

Natural gas production data are collected from 33 gas-producing States on Form EIA-895 which includes gross withdrawals, vented and flared, repressuring, nonhydrocarbon gases removed, fuel used on leases, marketed production (wet), and extraction loss. The U.S. Minerals Management Service (MMS) also supplies data on the quantity and value of natural gas production on the Gulf of Mexico and Outer Continental Shelf. No adjustments are made to the data.

Estimated Monthly Data

State marketed production data for a particular month are estimated if data are unavailable at the time of publication. The data are estimated based on final monthly data reported on the Form EIA-895 for the previous year.

Estimates for total U.S. marketed production are based on final monthly data reported on the Form EIA-895 for the previous year. State estimates for nonhydrocarbon gas removed, gas used for repressuring, and gas vented and flared are based on the ratio of the item to gross withdrawals as reported on the EIA-895. These ratios are applied to the month's estimates for gross withdrawals to calculate figures for nonhydrocarbon gases removed, gas used for repressuring, and gas vented and flared. Estimates for gross withdrawal data are calculated from final

monthly data filed on Form EIA-895 for the previous year.

Preliminary Monthly Data

All monthly data are considered preliminary until after publication of the *Natural Gas Annual* for the year in which the report month falls. Preliminary monthly data are published from reports from the Form EIA-895 and the MMS. Volumetric data are converted, as necessary, to a standard 14.73 psia pressure base. Data are revised as Table 7 monthly data are updated.

Final Monthly Data

Final monthly data for 1993, 1994, and 1995 are the sums of monthly data reported on the annual Form EIA-627, "Annual Quantity and Value of Natural Gas Report." For prior years, the differences between each State's annual production data reported on the EIA-627 and the sum of its monthly IOGCC reports for the year were allocated proportionally to the monthly IOGCC data.

Note 4. Imports and Exports

Annual Data and Final Monthly Data

Annual and final monthly data are published from the Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*, which requires data to be reported each quarter by month for the calendar year.

Preliminary Monthly Data - Imports

Preliminary monthly import data are based on data from the National Energy Board of Canada and responses to informal industry contacts and EIA estimates. Preliminary data are revised after the publication of the article "U.S. Imports and Exports of Natural Gas" for the calendar year.

Preliminary Monthly Data - Exports

Preliminary monthly export data are based on historical data from the Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*, informal industry contacts, and information gathered from natural gas industry trade publica-

tions. Preliminary monthly data are revised after publication of “U.S. Imports and Exports of Natural Gas” for the calendar year in which the report month falls.

Note 5. Consumption

All Annual Data

All consumption data except electric utility data are from the Form EIA-857 and Form EIA-176. No adjustments are made to the data. Electric utility data are reported on Form EIA-759.

Monthly Data

All monthly data are considered preliminary until after publication of the *Natural Gas Annual*.

Total Consumption

Preliminary Monthly Data

The most current month estimate is calculated based on the arithmetic average change from the previous month for the previous 3 years. The following month this estimate is revised by summing the components (pipeline fuel, lease and plant fuel, and deliveries to consumers).

Final Monthly Data

Monthly data are revised after publication of the *Natural Gas Annual*. Final monthly total consumption is obtained by summing its components.

Residential, Commercial, and Industrial Sector Consumption

Preliminary Monthly Data

Preliminary monthly residential, commercial, and industrial data are from Form EIA-857. See Appendix C, “Statistical Considerations,” for a detailed explanation of sample selection and estimation procedures.

Average Price of Deliveries to Consumers

Price data are representative of prices for gas sold and delivered to residential, commercial, and industrial consumers. These prices do not reflect average

prices of natural gas transported to consumers for the account of third parties or “spot-market” prices.

Final Monthly Data

Monthly data are revised after the publication of the *Natural Gas Annual*. Final monthly data are estimated by allocating annual consumption data from the Form EIA-176 to each month in proportion to monthly volumes reported in Form EIA-857.

Agricultural Use

Beginning with the reporting of 1996 annual data, the EIA changed the customer category used for reporting deliveries to consumers in the agricultural industry from commercial to industrial. In 1995 and earlier years, consumption of natural gas for agricultural use was classified as commercial use. Separate reports of the volumes affected are not available so the direct impact of this change is not known. Most natural gas consumed in agriculture is used to drive irrigation systems and to dry crops.

For the reporting of monthly data, the customer category will not be changed until 1998. In 1996, the monthly data reported under the old classification were adjusted to the annual data reported under the new classification. Monthly 1997 data will be adjusted in the same way as the 1996 data.

In comparing sectoral use over time, note that:

- There is an inherent shift in natural gas volumes from the commercial to industrial sectors due simply to changes in the reporting requirements. This break in series may indicate a spurious increase in industrial consumption with a corresponding decrease in the commercial sector.
- The sum of natural gas volumes consumed by the commercial and industrial sectors will not be changed by this modification of the instructions.

Electric Utility Sector Consumption

All Monthly Data

Monthly data published are from Form EIA-759.

Pipeline Fuel Consumption

Preliminary Monthly Data

Preliminary data are estimated based on the pipeline fuel consumption as an annual percentage of total consumption from the previous year's Form EIA-176. This percentage is applied to each month's total consumption figure to compute the monthly estimate.

Final Monthly Data

Monthly data are revised after the publication of the *Natural Gas Annual*. Final monthly data are based on the revised annual ratio of pipeline fuel consumption to total consumption from the Form EIA-176. This ratio is applied to each month's revised total consumption figure to compute final monthly pipeline fuel consumption estimates.

Lease and Plant Fuel Consumption

Preliminary Monthly Data

Preliminary monthly data are estimated based on lease and plant fuel consumption as an annual percentage of marketed production. This percentage is applied to each month's marketed production figure to compute estimated lease and plant fuel consumption.

Final Monthly Data

Monthly data are revised after publication of the *Natural Gas Annual*. Final monthly plant fuel data are based on a revised annual ratio of lease and plant fuel consumption to marketed production from Form EIA-176. This ratio is applied to each month's revised marketed production figure to compute final monthly plant fuel consumption estimates. Final monthly lease data are collected on the Form EIA-627 and estimates from the Form EIA-176. See the *Natural Gas Annual* for a complete discussion of this process.

Note 6. Extraction Loss

Annual Data

Extraction loss data are calculated from filings of Form EIA-64A, "Annual Report of the Origin of Natural Gas Liquids Production." For a fuller discussion, see the *Natural Gas Annual*.

Preliminary Monthly Data

Preliminary data are estimated based on extraction loss as an annual percentage of marketed production.

This percentage is applied to each month's marketed production to estimate monthly extraction loss.

Final Monthly Data

Monthly data are revised after the publication of the *Natural Gas Annual*. Final monthly data are estimated by allocating annual extraction loss data to each month based on its total natural gas marketed production.

Note 7. Natural Gas Storage

Underground Natural Gas Storage

All monthly data concerning underground storage are published from the EIA-191. A new EIA-191 became effective in January 1994. Injection and withdrawal data from the EIA-191 survey are adjusted to correspond to data from Form EIA-176 following publication of the *Natural Gas Annual*.

Underground and Liquefied Natural Gas Storage

The final monthly and annual storage and withdrawal data for 1991 through 1995 shown in Table 2 include both underground and liquefied natural gas (LNG) storage. Underground storage data are obtained from the EIA-191 and EIA-176 surveys in the manner described earlier. Annual data on LNG additions and withdrawals are taken from Form EIA-176. Monthly data are estimated by computing the ratio of each month's underground storage additions and withdrawals to annual underground storage additions and withdrawals and applying it to annual LNG data.

Types of Underground Storage Facilities

There are three principal types of underground storage facilities in operation in the United States today: salt caverns (caverns hollowed out in salt "bed" or "dome" formations), depleted fields (depleted reservoirs in oil and/or gas fields), and aquifer reservoirs (water-only reservoirs conditioned to hold natural gas). A storage facility's daily deliverability or withdrawal capability is the amount of gas that can be withdrawn from it in a 24-hour period. Salt cavern storage facilities generally have high deliverability because all of the

working gas in a given facility can be withdrawn in a relatively short period of time. (A typical salt cavern cycle is 10 days to deplete working gas, and 20 days to refill working gas.) By contrast, depleted field and aquifer reservoirs are designed and operated to withdraw all working gas over the course of an entire heating season (about 150 days). Further, while both traditional and salt cavern facilities can be switched from withdrawal to injection operations during the heating season, this is usually more quickly and easily done in salt cavern facilities, reflecting their greater operational flexibility.

Note 8. Average Wellhead Value

Annual Data

Form EIA-895 requests State agencies to report the quantity and value of marketed production. When complete data are unavailable, the form instructs the State agency to report the available value and the quantity of marketed production associated with this value. A number of States reported volumes of production and associated values for other than marketed production. In addition, information for several States which were unable to provide data was obtained from Form EIA-176. It should be noted that Form EIA-176 reports a fraction of State production. The imputed value of marketed production in each State is calculated by dividing the State's reported value by its associated production. This unit price is then applied to the quantity of the State's marketed production to derive the imputed value of marketed production.

Preliminary Monthly Data

Preliminary values for the monthly U.S. natural gas wellhead price are estimated from the New York Mercantile Exchange (NYMEX) futures closing price for near-month delivery at the Henry Hub, and prevailing cash market prices (spot prices) at 5 major trading hubs: Henry Hub, LA; Carthage, TX; Katy, TX; Waha, TX; and Blanco, NM. The NYMEX price is reported in the trade publication, *Gas Daily* (published by Financial Times Energy). The spot prices are published in another trade publication, *Natural Gas Week* (Energy Intelligence Group), and they reflect the spot delivered-to-pipeline, volume-weighted average prices for natural gas bought and sold at the specified trading hubs. Prices include processing, gathering, and transportation fees to the hubs. The estimated wellhead prices are derived

with a statistical procedure based on analysis of monthly time series data for the period 1995 through 1999. A statistical procedure was adopted beginning with publication of the February 1999 issue of the *Natural Gas Monthly*. The preliminary estimates are replaced when annual survey data become available, usually about 10 months after the end of the report year.

Final Monthly Data

The Form EIA-895 requests State agencies to report monthly values of marketed production. Preliminary monthly gas price data are replaced by these final monthly data.

Note 9. Balancing Item

The "balancing item" category represents the difference between the sum of the components of natural gas supply and the sum of the components of natural gas disposition. These differences may be due to quantities lost or to the effects of data reporting problems.

Reporting problems include differences due to the net result of conversions of flow data metered at varying temperatures and pressure bases and converted to a standard temperature and pressure base; the effect of variations in company accounting and billing practices; differences between billing cycles and calendar periods; and imbalances resulting from the merger of data reporting systems, which vary in scope, format, definitions, and type of respondents.

Annual Data

Annual data are from the *Natural Gas Annual*. For an explanation of the methodology involved in calculating annual "balancing item" data, see the *Natural Gas Annual*.

Preliminary Monthly Data

Preliminary monthly data in the "balancing item" category are calculated by subtracting dry gas production, withdrawals from storage, supplemental gaseous fuels, and imports from total supply/disposition.

Note 10. Heating Degree-Days

Degree-days are relative measurements of outdoor air temperature. Heating degree-days are deviations of the mean daily temperature below 65 degrees Fahrenheit. A weather station recording a mean daily temperature of 40 degrees Fahrenheit would report 25 heating degree-days. There are several degree-day data bases maintained by the National Oceanic and Atmospheric Administration. The information published in the Natural Gas Monthly is developed by the National

Weather Service Climate Analysis Center, Camp Springs, Maryland.

The data are available weekly with monthly summaries and are based on mean daily temperatures recorded at about 200 major weather stations around the country. The temperature information recorded at these weather stations is used to calculate Statewide degree-day averages weighted by gas home customers. The State figures are then aggregated into Census Divisions and into the national average.

Appendix B

Data Sources

The data in this publication are taken from survey reports authorized by the U.S. Department of Energy (DOE), Energy Information Administration (EIA) and by the Federal Energy Regulatory Commission (FERC). The EIA is the independent statistical and analytical agency within the DOE. The FERC is an independent regulatory commission within the DOE which has jurisdiction primarily in the regulation of electric utilities and the interstate natural gas industry. The EIA conducts and processes some of the surveys authorized by the FERC. Data are collected from two annual surveys and five monthly surveys.

The annual report is the Form EIA-176, a mandatory survey of all companies that deliver natural gas to consumers or that transport gas across State lines.

The monthly reports include two surveys of the natural gas industry, two surveys of the electric utility industry, and a voluntary survey completed by energy or conservation agencies in the gas producing States. The natural gas industry survey is the Form EIA-191 filed by companies that operate underground storage facilities, and the Form EIA-857 is filed by a sample of companies that deliver natural gas to consumers. The electric utility industry surveys are the Form EIA-759 filed by all generating electric utilities and the Form FERC-423 filed by fossil fueled plants. Responses to these four monthly surveys are mandatory.

A description of the survey respondents, reporting requirements, and processing and editing of the data is given on the following pages for each of the surveys.

Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition"

Survey Design

The original version of Form EIA-176 was approved in 1980 with a mandatory response requirement. Prior to 1980, published data were based on voluntary responses to Bureau of Mines, U.S. Department of the Interior predecessor Forms BOM-6-1340-A and BOM-6-1341-A of the same title.

In 1982, the scope of the revised EIA-176 survey was expanded to collect the number of electric utility consumers in each State, volumes of gas transported to industrial and electric utility consumers, detailed information on volumes transported across State borders by the respondent for others and for the responding company, and detailed information on other disposition. These changes were incorporated to provide more complete survey information with a minimal change in respondent burden. The 1982 version of the Form EIA-176 continues to be the basis for the current version of this form.

In 1988, the Form EIA-176 was revised to include data collection for deliveries of natural gas to commercial and industrial consumers for the account of others. A short version of Form EIA-176 was also approved in 1988. Companies engaged in purchase and delivery activities but not in transportation and storage activities may file the short form. Usually, these companies are municipals handling small volumes of gas. form was approved for use beginning with report year 1990.

In 1990, the Form EIA-176 was revised to include more detailed information for gas withdrawn from storage facilities, gas added to storage facilities, deliveries of company-owned natural gas and natural gas transported for the account of others. The revised form was approved for use beginning with report year 1990.

Upon the Office of Management and Budget's approval in 1993, the Form EIA-176 was again revised. All deliveries to consumers are now categorized as firm or interruptible. Commercial and industrial consumers are further categorized as nonutility power producers or as those excluding nonutility power producers.

Data reported on this form are no longer considered proprietary. Response to the form continues to be mandatory.

Survey Universe and Response Statistics

The Form EIA-176 is mailed to all identified interstate and intrastate natural gas pipeline companies, investor and municipally owned natural gas distributors, underground natural gas storage operators, synthetic natural gas plant operators, and field, well, or processing plant operators that deliver natural gas directly to consumers (including their own industrial facilities) and/or that transport gas to, across, or from a State border through field or gathering facilities.

Each company and its parent company or subsidiaries were required to file if they met the survey specifications. The original mailing in 1999 for report year 1998 totaled 1,910 questionnaire packages. To this original mailing, 5 names were added and 32 were deleted as a result of the survey processing. Additions were the result of comparisons of the mailing list to other survey mailing lists. Deletions resulted from post office returns and determinations that companies were out of business, sold, or not within the scope of the survey. After all updates, the survey universe was 1,883 responses from approximately 1,800 companies.

Following the original mailing, second request mailing, and nonrespondents follow-up, 1,883 responses were entered into the data base, and there were 50 nonrespondents.

Summary of Form EIA-176 Data Reporting Requirements

The EIA-176 is a multi-line schedule for reporting all supplies of natural gas and supplemental gaseous fuels and their disposition within the State indicated. Respondents file completed forms with EIA in Washington, DC. Data for the report year are due by April 1 of the following year. Extensions of the filing deadline for up to 45 days are granted to any respondent on request.

All natural gas and supplemental gaseous fuels volumes are reported on a physical custody basis in thousand cubic feet (Mcf), and dollar values are reported to the nearest whole dollar. All volumes are reported at 14.73 pounds per square inch absolute pressure (psia) and 60 degrees Fahrenheit.

Routine Form EIA-176 Edit Checks

A series of manual and computerized edit checks are used to screen the Form EIA-176. The edits performed include validity, arithmetic, and analytical checks.

The incoming forms are reviewed prior to keying. This prescan determines if the respondent identification (ID) number and the company name and address are correct, if the data on the form appear complete and reasonable, and if the certifying information is complete.

Manual checks on the data are also made. Each form is prescanned to determine that data were reported on the correct lines. The flow of gas through interstate pipelines is checked at the company level to ensure that each delivery from a State is matched with a corresponding receipt in an adjoining State.

After the data are keyed, computer edit procedures are performed. Edit programs verify the report year, State code, and arithmetic totals. Further tests are made to ensure that all necessary data elements are present and that the data are reasonable and internally consistent. The computerized edit system produces error listings with messages for each failed edit test. When problems occur, respondents are contacted by telephone and required to file amended forms with corrected data.

Other EIA Publications Referencing Form EIA-176

Data from Form EIA-176 are also published in the *Natural Gas Annual*.

Form-627 and Form EIA-895

Survey Design

Beginning with 1980 data, natural gas production data previously obtained on an informal basis from the appropriate State agencies were collected on the Form EIA-627, "Annual Quantity and Value of Natural Gas Report." This form was designed by the EIA to collect annual natural gas production data from the appropriate State agencies under a standard data reporting system within the limits imposed by the diversity of data collection systems of the various producing States. It was also designed to avoid duplication of the efforts involved in the collection of production and value data by producing States and to avoid an unnecessary respondent burden on gas and oil well operators. In 1993, value and associated volume of marketed production by month was added to the EIA-627. In 1996, the Form EIA-627 was discontinued. The information is collected on an annual schedule on the Form EIA-895.

In 1993, the Office of Management and Budget approved the Form EIA-627 for use in report years 1994 through 1996. In 1994, the IOGCC decided to discontinue collection of their form. Data collection on the Form EIA-895 began in January 1995. This form was designed to replace the Interstate Oil and Gas Compact Commission (IOGCC) form, "Monthly Report of Natural Gas Production." All gas producing States are requested to report on the Form EIA-895; a voluntary report. In 1996, an annual schedule was added to the voluntary Form EIA-895 to replace the Form EIA-627. Data are reported by State agencies. The form was designed to provide a standard reporting system, to the extent possible, for the natural gas data reported by the States. Data are not considered proprietary.

Survey Universe and Response Statistics

Form EIA-895 is mailed to energy or conservation agencies in all 33 natural gas producing States. All producing States participate voluntarily in the EIA-895 survey by filing the completed form or by responding to telephone contacts. EIA-895 survey by fil-

ing the completed form or by responding to telephone contacts.

Reports on State production are due 20 days after the end of the report month. (In most cases, the data are not available to the States until after this time period.

Therefore, States are requested to send the report within 80 days after the end of the report month.) The annual schedule of the Form EIA-895 is due with the December data report.

Of the 33 natural gas producing states, 31 participated in the voluntary EIA-895 survey by filing the completed form or by responding to telephone contacts. Data for the 2 nonresponding States (Illinois and West Virginia) were estimated. Data on the quantities of nonhydrocarbon gases removed in 1998 were reported by the appropriate agencies of 22 of the 33 producing States. These 22 States accounted for 66 percent of total 1998 gross withdrawals. In addition, the gross withdrawal data from Kansas, Louisiana, Montana, and Oklahoma, which together accounted for 39 percent of total production, excluded all or most of the nonhydrocarbon gases removed on leases. The State of Missouri reported zero gross withdrawals.

The commercial recovery of methane from coalbeds contribute a significant amount to the production totals in a number of States. Coalbed methane seams production quantities (in million cubic feet) are included in gross withdrawals totals for the following States: Alabama (116,946), Colorado (387,376), and New Mexico (608,000).

Summary of Data Reporting Requirements

The Form EIA-895 is a two-page form divided into five parts. Part I requests identifying information including the name and location of the responding State agency and the name and telephone number of a contact person within the agency. Part II collects monthly data on the production of natural gas including gross withdrawals from both gas and oil wells; volumes returned to formation for repressuring, pressure maintenance, and cycling; quantities vented and flared; quantities of nonhydrocarbon gases removed; quantities of fuel used on lease; and marketed production. Part III of the form is for reporting the monthly volume and value of marketed production. Part IV of the form is the annual schedule which collects data on the

number of producing gas wells, the production of natural gas including gross withdrawals from both gas and oil wells; volumes returned to formation for repressuring, pressure maintenance, and cycling; quantities vented and flared; quantities of nonhydrocarbon gases removed; quantities of fuel used on lease; marketed production; the value of marketed production; and quantity of marketed production (value based). Part V is space to be used by the respondent to explain data elements reported that may be based on definitions differing from those applied to data in previous years.

Respondents are asked to report all volumes in thousand cubic feet at the State's standard pressure base and at 60 degrees Fahrenheit. All dollar values are reported in thousands.

Routine Form EIA-895 Edit Checks

Each filing of Form EIA-895 is manually checked for reasonableness and mathematical accuracy. Information on the forms is compared to totals of monthly data reported. Volumes are converted, as necessary, to a standard 14.73 psia pressure base. Reasonableness of data is assessed by comparing reported data to the previous year's data. State agencies are contacted by telephone to correct errors. Amended filings or resubmissions are not a requirement, since participation in the survey is voluntary.

Other EIA Publications Referencing Form EIA-895

Data from Form EIA-895 are also published in the EIA publication, *Natural Gas Annual*.

EIA-191 Survey, "Underground Natural Gas Storage Report"

Survey Design

The Form EIA-191, "Underground Natural Gas Storage Report," was revised effective January 1994. Among the changes from the form used from 1991 through 1993 is a distinction between a monthly and annual survey. Prior to 1991, data on the storage of natural gas were collected on a survey jointly implemented in 1975 by the Federal Power Commission (FPC), the Federal Energy Administration (FEA), and the Bureau of Mines (BOM) as the FPC-8/FEA-G-318 system. The data received on both the FPC-8 and

FEA-G-318 were computerized and aggregated by FPC. The form was previously revised in 1991 to include storage data by State, field, and reservoir.

At the beginning of 1979, the EIA assumed responsibility for the collection, processing, and publication of the data gathered in the survey. Form FEA-G-318 was renewed on July 1, 1979, as Form EIA-191 and the survey was retitled the FPC-8/EIA-191 Survey (Figure D4 shows the EIA-191). Form FPC-8 was renewed in December 1985 and the survey retitled FERC-8/EIA-191 Survey. The forms were not merged because of FERC's stated desire to maintain the separate identity of the FERC-8 for administrative reasons. In September 1995, the FERC discontinued the reporting requirements of Form FERC-8. FERC jurisdictional firms will continue to file Form EIA-191.

Survey Universe and Response Statistics

The 114 companies that operate underground facilities will file the Form EIA-191. Of these companies, 42 are subject to the jurisdiction of FERC and are required to report data on Form EIA-191.

The response rate as of the filing deadline is approximately 20 percent. Data from the remaining 80 percent of respondents are received in writing and/or by telephone within 3 to 4 days after the filing deadline. All data supplied by telephone are subsequently filed in writing, generally within 15 days of the filing deadline. The final response rate is 100 percent.

Summary of EIA-191 Data Reporting Requirements

The EIA-191 monthly schedule contains current month and prior month's data on the total quantities of gas in storage, injections and withdrawals, the location (including State and county, field, reservoir) and peak day withdrawals during the reporting period. Prior month's data are required only when data are revised. Information on co-owners of storage fields has been eliminated. The annual schedule contains type of facility, storage field capacity, maximum deliverability and pipelines to which each field is connected. The annual schedule is filed with the January submission.

Collection of the survey is on a custody basis. Information requested must be provided within 20 days after the first day of each month. Twelve reports are required per calendar year. Respondents are required to indicate whether the data reported are actual or estimated. For most of the estimated filings, the actual data or necessary revisions are reflected in the prior month section of the monthly form. Actual data on natural gas injections and withdrawals from underground storage are based on metered quantities. Data on quantities of gas in storage and on storage capacity represent, in part, reservoir engineering evaluations. All volumes are reported at 14.73 psia and 60 degrees Fahrenheit.

Routine Form EIA-191 Edit Checks

Data received on Form EIA-191 are entered into the survey processing system. The survey's five principal data elements (total, base, working gas in storage, injections, and withdrawals) receive a preliminary visual edit to eliminate and correct obvious errors or omissions. Respondents are required to re-file reports containing any inconsistencies or errors.

Other EIA Publications Referencing Form EIA-191

The EIA publication *Monthly Energy Review* and *Winter Fuels Report* contain data from the EIA-191 survey.

"Quarterly Natural Gas Import and Export Sales and Price Report"

Survey Design

The collection of data covering natural gas imports and exports was begun in 1973 by the Federal Power Commission (FPC). On October 1977, FPC ceased to exist and its data collection functions were transferred to the Federal Energy Regulatory Commission (FERC) within the Department of Energy (DOE). From 1979 to 1994, the Energy Information Administration (EIA) has had the responsibility for collecting Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." Data are not considered proprietary. The Form FPC-14 was discontinued in 1995.

Beginning in 1995, import and export data are taken from the "Quarterly Natural Gas Import and Export Sales and Price Report." This report is prepared by the Office of Fossil Energy, U.S. Department of Energy, based on information submitted by all firms having authorization to import or export natural gas.

Survey Universe and Response Statistics

All companies are required, as a condition of their authorizations to import or export natural gas, to file quarterly reports with the Office of Fossil Energy. These data are collected as part of its regulatory responsibilities. The data are reported at a monthly level of detail. Data reported on the Form FPC-14 represented physical movements of natural gas. Data collected by the Office of Fossil Energy are reported on an equity (sales) basis. For 1994 and earlier years, comparisons of the data from the two sources may show differences because reporting requirements were different. Prior to 1995, the Form FPC-14 was filed annual by each organization or individual having authority to import and export natural gas regardless of whether any activity took place during the reporting year. Authorizations to import and export were originally granted by the FPC. In 1977, the authority to grant authorizations transferred to the Economic Regulatory Administration (ERA). It now resides with the Office of Fossil Energy, U.S. Department of Energy.

Routine Edit Checks

Respondents are required to certify the accuracy of all data reported. The data are checked for reasonableness and accuracy. If errors are found, the companies are required to file corrected data. The data are compared with data reported by the National Energy Board of Canada and are published quarterly. All natural gas volumes in this report are expressed at a pressure base of 14.73 pounds per square inch absolute and temperature of 60 degrees Fahrenheit, except as noted. All import and export prices are in U.S. dollars and, except for LNG exports, are those paid at the U.S. border. LNG export prices are those paid at the point of sale and delivery in Yokohama, Japan.

Form EIA-857, “Monthly Report of Natural Gas Purchases and Deliveries to Consumers”

Survey Design

The original Form EIA-857 was approved for use in December 1984. Response to the Form EIA-857 is mandatory on a monthly basis. Data collected on the Form EIA-857 cover the 50 States and the District of Columbia and include both price and volume data. Data are considered proprietary.

Survey Universe and Response Statistics

A sample of approximately 400 natural gas companies, including interstate pipelines, intrastate pipelines, and local distribution companies, report to the survey. The sample was selected independently for each of the 50 States and the District of Columbia from a frame consisting of all respondents to Form EIA-176 who reported deliveries of natural gas to consumers in the residential, commercial, or industrial sectors. Each selected company is required to complete and file the Form EIA-857 on a monthly basis. Initial response statistics on a monthly basis are as follows: responses received by due date, approximately 50 percent, and responses received after follow-up, 100 percent. Virtually all are received in time for incorporation in the current month’s processing cycle. When a response is extremely late, and the company represents less than 25 percent of the natural gas volumes delivered by all sampled companies in the State, values are imputed as described in Appendix C. When the company’s submission is

eventually received, the submitted data are used for future processing and revisions.

The Form EIA-857 is a monthly sample survey of firms delivering natural gas to consumers. It provides data that are used to estimate monthly sales of natural gas (volume and price) by State and monthly deliveries of natural gas on behalf of others (volume) by State to three consumer sectors - residential, commercial, and industrial. (Monthly deliveries and prices of natural gas to electric utilities are reported on the Form FERC-423, “Monthly Report of Cost and Quality of Fuels for Electric Plants,” and the Form EIA-759, “Monthly Power Plant Report.”) See Appendix C for a discussion of the sample design and estimation procedures.

Summary of Form EIA-857 Data Reporting Requirements

Data collected monthly on the Form EIA-857 on a State level include the volume and cost of purchased gas, the volume and cost of natural gas consumed by sector (residential, commercial, and industrial), and the average heat content of all gas consumed. Respondents file completed forms with EIA in Washington, DC on or before the 30th day after the end of the report month.

All natural gas volumes are reported in thousand cubic feet at 14.73 psia at 60 degrees Fahrenheit and dollar values are reported to the nearest whole dollar.

Routine Form EIA-857 Edit Checks

A series of manual and computerized edit checks are used to screen the Form EIA-857. The edits performed include validity and analytical checks.

Appendix C

Statistical Considerations

The monthly sales (volume and price) and monthly deliveries (volume) of natural gas to residential, commercial and industrial consumers presented in this report by State are estimated from data reported on the Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers." (See Appendix B for a description of this Form.) These estimations must be made from the reported data since the Form EIA-857 is a sample survey. A description of the sample design and the estimation procedures is given below.

Sample Design

The Form EIA-857 is a monthly sample survey of companies delivering natural gas to consumers. It includes inter- and intrastate companies, and producers, as well as local distribution companies. The survey provides data that are used each month to estimate the volume of natural gas delivered and the price for onsystem sales of natural gas by State to three consumer sectors—residential, commercial, and industrial. Monthly deliveries and prices of natural gas to electric utilities are reported on the Form EIA-759, "Monthly Power Plant Report," and the Form FERC-423, "Monthly Report of Costs and Quality of Fuels for Electric Plants."

Sample Universe. The sample currently in use was selected from a universe of 1,538 companies. These companies were respondents to the Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," for reporting year 1995 who reported sales or deliveries to consumers in the residential, commercial or industrial sectors. (See Appendix B for a description of the Form EIA-176.)

Sampling Plan. The goal was a sample that would provide estimates of monthly natural gas consumption by the three consuming sectors within each State and the District of Columbia. A stratified sample using a single stage and systematic selection with probability

proportional to size was designed. The measure of size was the volume of natural gas physically delivered in the State to the three consuming sectors by the company in 1995. There were two strata—companies selected with certainty and companies selected under the systematic probability proportional to size design.

Initial calculations showed that a 25 percent sample of companies would yield reasonably accurate estimates. The sample was selected independently in each State, resulting in a national total of 387 respondent companies. Unlike previous years, no mergers or acquisitions were uncovered as a result of the initial mail-out. Therefore there was no need for either substitution of respondent companies or a reduction in the total number of respondents.

Certainty Stratum. Since estimates were needed for each of the 50 States and the District of Columbia, the strata were established independently within each State. In 16 States and the District of Columbia where sampling was not feasible due to small numbers of companies and/or small volumes of gas deliveries, all companies were selected. The 16 States were: Alaska, Connecticut, Delaware, Hawaii, Idaho, Maine, North Dakota, New Hampshire, New Jersey, Nevada, Oregon, Rhode Island, South Dakota, Utah, Vermont, and Washington.

For each of the remaining States, the total volumes of industrial sales and deliveries and of the combined residential/commercial sales and deliveries were determined. Companies with natural gas deliveries to the industrial sector or to the combined residential/commercial sector above a certain level were selected with certainty. Since a few large companies often account for most of the natural gas delivered within a State, this ensures those companies' inclusion in the sample. The formula for determining certainty was applied independently in the two consumer sectors—the industrial

and the combined residential/commercial. These selected companies, together with the companies in the jurisdictions discussed where sampling was not feasible, formed the certainty stratum.

All companies with natural gas deliveries in sector j greater than the cut-off value (C_j) were included in the certainty stratum. The formula for C_j was:

$$C_j = \frac{X_{.j}}{2n} \quad (1)$$

where:

C_j = cutoff value for consumer sector j ,

n = target sample size to be selected for the State, 25 percent of the companies in the State,

X_{ij} = the annual volume of natural gas deliveries by company i to customers in consumer sector j ,

$X_{.i}$ = the sum within State of annual gas volumes for company i ,

$X_{.j}$ = the sum within State of annual gas volumes in consumer sector j ,

$X_{..}$ = the sum within State of annual gas volumes in all consumer sectors.

Noncertainty Stratum. All other companies formed the noncertainty stratum. They were systematically sampled with probability proportional to size. The measure of size for each company was the total volume of gas sales to all consumer sectors ($X_{.i}$). The number of companies to be selected from the noncertainty stratum was calculated for each State, with a minimum of 2.

The formula for selecting the number of noncertainty stratum companies was:

$$m = n \frac{X_2}{X_{..}} \quad (2)$$

where:

m = the sample size for the noncertainty stratum within a State,

X_2 = the sum within State of the $X_{.i}$ for all companies in the noncertainty stratum.

Companies were listed in ascending order according to their measure of size and then a cumulative measure of size in the stratum was calculated for each company. The cumulative measure of size was the sum of the measures of size for that company and all preceding companies on the list. An interval of width I for selecting the companies systematically was calculated using.

A uniform random number R was selected between zero and $\left(I = \frac{X_2}{m} \right) I$. The first sampled company was

the first company on the list to have a cumulative measure of size greater than R . The second company selected was the first company on the list to have a cumulative measure of size greater than $R + I$. $R + I$ was increased again by I to determine the third company to be selected. This procedure was repeated until the entire sample was drawn.

Subgroups. In eight States, the noncertainty stratum was divided into subgroups to ensure that gas in each consumer sector could be estimated. The systematic sample with probability proportional to size design described above was applied independently in each subgroup. The methods for determining the subgroup sample size and calculating the subgroup interval for sample selection were the same as the methods described above for the noncertainty stratum, except that X_2 was the sum within State of the $X_{.i}$ for only those companies in the subgroup.

These subgroups were defined only for the purpose of sample selection. They are:

California: companies handling only industrial gas and all other companies.

Iowa: companies handling industrial gas and companies delivering only to residential or commercial customers.

Louisiana: companies handling only industrial gas and all other companies, with the latter being further subdivided according to size. The larger group is comprised of all companies with total deliveries of at least 200 million cubic feet while the smaller group consists of companies with less than that volume of delivered gas (three subgroups).

Oklahoma: Companies delivering less than 500 million cubic feet of gas and those delivering more than that volume.

Texas: companies handling only residential/commercial gas, companies handling only industrial gas, and all other companies (three subgroups).

Estimation Procedures

Estimates of Volumes. A ratio estimator is applied to the volumes reported in each State by the sampled companies to estimate the total gas sales and deliveries for the State. Ratio estimators are calculated for each consumer sector—residential, commercial, and industrial—in each State where companies are sampled. The following annual data are taken from the most recent 1995 submissions of Form EIA-176:

The formula for calculating the ratio estimator (E_{vj}) for the volume of gas in consumer sector j is:

$$E_{vj} = \frac{Y_{.j}}{Y'_{.j}} \quad (3)$$

where:

$Y_{.j}$ = the sum within State of annual gas volumes in consumer sector j for all companies,

$Y'_{.j}$ = the sum within State of annual gas volumes in consumer sector j for those companies in the sample.

The ratio estimator is applied as follows:

$$V_{.j} = y_{.j} \times E_{vj} \quad (4)$$

where:

$V_{.j}$ = the State estimate of monthly gas volumes in consumer sector j ,

$y_{.j}$ = the sum within State of reported monthly gas volumes in consumer sector j .

Computation of Natural Gas Prices. The natural gas volumes that are included in the computation of prices represent only those volumes associated with natural gas sales.

The price of natural gas for a State within a sector is calculated as follows:

$$P_j = \frac{R_j}{V_j}$$

where:

P_j = the average price for gas sales within the State in consumer sector j ,

R_j = the reported revenue from natural gas sales within the State in consumer sector j ,

V_j = the reported volume of natural gas sales within the State in consumer sector j .

All average prices are weighted by their corresponding sales volume estimates when national average prices are computed.

The monthly average prices of natural gas are based on sales data only. Volumes of gas delivered for the account of others to these consumer sectors are not included in the State or national average prices.

Table 25 shows the percent of the total State volume that represents volumes from natural gas sales to the commercial and industrial sectors. This table may be helpful in evaluating commercial and industrial price data. Virtually all natural gas deliveries to the residential sector represent onsystem sales volumes only.

See the section on consumer price calculations in this Appendix for further price information.

Estimation for Nonrespondents. A volume for each consumer category is imputed for companies that fail to respond. The imputation is based on the previous month's value reported by the non-responding company and the change from the previous month to the current month in volumes reported by other companies in the State. The imputed volumes are included in the State totals. To estimate prices for non-respondents, the unit price (dollars per thousand cubic feet) reported by the company in the previous month is used.

The formula for imputing volumes of gas sales for nonrespondents was:

$$F_t = F_{t-1} \times \frac{Y_{.jt}}{Y_{.jt-1}} \quad (5)$$

where:

F_t = imputed gas volume for current month t ,

F_{t-1} = gas volume for the company for the previous month,

y_{jt} = gas volume reported by companies in the State stratum for report month t,

$y_{j,t-1}$ = gas volume in the previous month for companies in the State stratum that reported in month t.

Final Revisions

Adjusting Monthly Data to Annual Data. After the annual data reported on the Form EIA-176 have been submitted, edited, and prepared for publication in the *Natural Gas Annual*, revisions are made to monthly data. The revisions are made to the volumes and prices of natural gas delivered to consumers that have appeared in the *Natural Gas Monthly* to match them to the annual values appearing in the *Natural Gas Annual*. The revised monthly estimates allocate the difference between the sum of monthly estimates and the annual reports according to the distribution of the estimated values across the months.

Before the final revisions are made, changes or additions to submitted data received after publication of the monthly estimate and not sufficiently large to require a revision to be published in the *Natural Gas Monthly*, are used to derive an updated estimate of monthly consumption and revenues for each State's residential, commercial, or industrial natural gas consumption.

For each State, two numbers are revised, the estimated consumption and the estimated price per thousand cubic feet.

The formula for revising the estimated consumption is:

$$V_{jm}^* = V_{jm} + \left[(V_{ja} - V'_{jm}) \left(\frac{V_{jm}}{V'_{jm}} \right) \right] \quad (6)$$

where:

V_{jm}^* = the final volume estimate for month m in consumer sector j,

V_{jm} = the estimated volume for month m in consumer sector j,

V_{ja} = the volume for the year reported on Form EIA-176,

V'_{jm} = The annual sum of estimated monthly volumes.

The price is calculated as described above in the Estimation Procedures section, using the final revised consumption estimate and a revised revenue estimate.

The formula for revising the estimated revenue is:

$$R_{jm}^* = R_{jm} + \left[(R_{ja} - R'_{jm}) \left(\frac{R_{jm}}{R'_{jm}} \right) \right] \quad (7)$$

where:

R_{jm}^* = the final revenue estimate for month m in consumer sector j,

R_{jm} = the estimated revenue for month m in consumer sector j,

R_{ja} = the revenue for the year reported on Form EIA-176,

R'_{jm} = The annual sum of estimated monthly revenues. Revision of Volumes and Prices for Deliveries to Electric Utilities. Revisions to monthly electric utilities data are published throughout the year as they become available.

Reliability of Monthly Data

The monthly data published in this report are subject to two sources of error - nonsampling error and sampling error. Nonsampling errors occur in the collection and processing of the data. See the discussion of the Form EIA-857 in Appendix B for a description of nonsampling errors for monthly data.

Sampling error may be defined as the difference between the results obtained from a sample and the results that a complete enumeration would provide. The standard error statistic is a measurement of sampling error.

Standard Errors. A standard error of an estimate is a statistical measure that indicates how the estimate from the sample compares to the result from a complete enumeration. Standard errors are calculated based on statistical theory that refers to all possible samples of the same size and design.

The standard errors for monthly natural gas volume estimates by State are given in Table C1. Ninety-five percent of the time, the volume that would have been obtained from a complete enumeration will lie in the range between the estimated volume minus two

standard errors and the estimated volume plus two standard errors.

The standard error of the natural gas volume estimate is the square root of the variance of the estimate. The formula for calculating the variance of the volume estimate is:

$$V(\hat{Y}) = \sum_{h=1}^H \left[N_h^2 \frac{(1 - \frac{n_h}{N_h})}{n_h(n_h - 1)} \left(\sum_{i=1}^{n_h} (y_i - T x_i)^2 \right) \right] \quad (8)$$

where:

H = the total number of strata

N_h = the total number of companies in stratum h

n_h = the sample size in stratum h

y_i = the reported monthly volume for company i

x_i = the reported annual volume for company i

T = the ratio of the sum of the reported monthly volumes for sample companies to the sum of the reported annual volumes for the sample companies.

Table C-1. Standard Error for Natural Gas Deliveries and Price to Consumers by State, July 2000

State	Volume Million Cubic Feet				Price Dollars per Thousand Cubic Feet		
	Residential	Commercial	Industrial	Total	Residential	Commercial	Industrial
Alabama	117	119	1,615	1,623	0.16	1.01	3.09
Alaska	0	0	0	0	—	—	—
Arizona	0	0	0	0	—	—	—
Arkansas	NA	NA	92	NA	NA	NA	0.19
California	205	84	1,866	1,879	0.04	0.07	1.10
Colorado	NA	NA	NA	NA	NA	NA	NA
Connecticut	0	0	0	0	—	—	—
Delaware	0	0	0	0	—	—	—
District of Columbia	0	0	0	0	—	—	—
Florida	70	47	1,608	1,611	1.23	1.57	1.31
Georgia	144	111	19,826	19,827	0.67	1.10	8.73
Hawaii	0	0	0	0	—	—	—
Idaho	0	0	0	0	—	—	—
Illinois	58	1,646	3,305	3,693	0.40	2.43	0.23
Indiana	NA	480	3,164	NA	NA	0.52	0.17
Iowa	6	42	103	111	0.32	0.10	0.11
Kansas	994	5,280	27,089	27,616	2.16	1.65	0.78
Kentucky	75	269	94	295	1.73	1.23	0.06
Louisiana	NA	NA	4,042	NA	NA	NA	0.10
Maine	NA	NA	NA	NA	NA	NA	NA
Maryland	1	13	33	36	0.01	0.05	0.04
Massachusetts	NA	NA	NA	0	NA	NA	NA
Michigan	48	380	755	846	0.17	0.01	0.12
Minnesota	130	169	831	858	0.24	0.22	0.27
Mississippi	80	67	95	141	0.34	0.14	0.24
Missouri	0	0	0	0	—	—	—
Montana	3	5	0	6	0.03	0.02	—
Nebraska	11	83	746	750	0.50	0.57	0.25
Nevada	0	0	0	0	—	—	—
New Hampshire	NA	NA	NA	NA	NA	NA	NA
New Jersey	0	0	0	0	—	—	—
New Mexico	48	307	679	747	0.16	1.16	0.97
New York	NA	NA	3,346	NA	NA	NA	0.47
North Carolina	14	24	173	175	0.11	0.03	0.21
North Dakota	0	0	0	0	—	—	—
Ohio	318	8,112	6,395	10,334	0.84	0.19	0.47
Oklahoma	83	955	2,077	2,287	0.16	0.47	3.51
Oregon	0	0	0	0	—	—	—
Pennsylvania	NA	0	0	NA	NA	—	—
Rhode Island	0	0	0	0	—	—	—
South Carolina	10	29	762	763	0.18	0.06	0.07
South Dakota	0	0	0	0	—	—	—
Tennessee	80	140	1,493	1,501	0.33	0.20	0.64
Texas	NA	NA	NA	NA	NA	NA	NA
Utah	0	0	0	0	—	—	—
Vermont	0	0	0	0	—	—	—
Virginia	82	293	315	438	0.73	0.43	0.44
Washington	NA	NA	NA	NA	NA	NA	NA
West Virginia	36	258	1,100	1,131	0.63	1.25	1.88
Wisconsin	133	145	123	232	0.35	0.98	1.37
Wyoming	4	45	NA	NA	0.09	0.25	NA
Total	1,714	12,426	35,644	37,787	0.10	0.28	0.63

NA Not Available.
 — Not Applicable.

Source: Energy Information Administration, Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Appendix D

Articles, Special Focuses and Special Reports

A variety of energy-related subjects are frequently included in this publication. The following articles have appeared in previous issues.

Feature Articles

<i>Natural Gas 1998: Issues and Trends - Executive Summary</i>	April 1999
<i>Revisions to Monthly Natural Gas Data</i>	July 1998
<i>EIA Corrects Errors in EIA's Drilling Activity Estimates Series</i>	March 1998
<i>Recent Trends in Natural Gas Spot Prices</i>	December 1997
<i>Natural Gas Residential Pricing Developments During the 1996-97 Winter</i>	August 1997
<i>Revisions to Monthly Natural Gas Data</i>	July 1997
<i>Intricate Puzzle of Oil and Gas Reserves Growth</i>	July 1997
<i>Restructuring Energy Industries: Lessons from Natural Gas</i>	May 1997

Special Focuses

<i>Corporate Realignments and Investments in the Interstate Natural Gas Transmission System</i>	October 1999
<i>Deliverability on the Interstate Natural Gas Pipeline System</i>	May 1998
<i>Advance Summary: U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1996 Annual Report - Advance Summary</i>	September 1997
<i>Worldwide Natural Gas Supply and Demand and the Outlook for Global LNG Trade</i>	August 1997
<i>Outlook for Natural Gas Through 2015</i>	January 1997
<i>Natural Gas Productive Capacity</i>	January 1997

Special Reports

<i>U.S. Natural Gas Imports and Exports - 1999</i>	August 2000
<i>Natural Gas 1999: A Preliminary Summary</i>	May 2000

<i>Next Generation * Natural Gas (NG)² Information Requirements — Executive Summary</i>	February 2000
<i>Increasing Importance of Natural Gas Imports on the U.S. Marketplace</i>	February 2000
<i>Natural Gas Winter Outlook 1999-2000</i>	October 1999
<i>U.S. Natural Gas Imports and Exports - 1998</i>	August 1999
<i>Retail Unbundling</i>	July 1999
<i>Natural Gas 1998: A Preliminary Summary</i>	April 1999
<i>U.S. Natural Gas Imports and Exports - 1977</i>	August 1998
<i>Revisions to Monthly Natural Gas Data</i>	July 1998
<i>Natural Gas 1997: A Preliminary Summary</i>	April 1998
<i>Comparison of Natural Gas Storage Estimates from the EIA and AGA</i>	October 1997
<i>U.S. Underground Storage of Natural Gas in 1997: Existing and Proposed</i>	September 1997
<i>U.S. Natural Gas Imports and Exports - 1996</i>	August 1997
<i>Revisions to Monthly Natural Gas Data</i>	July 1997
<i>Natural Gas 1996: Highlights</i>	April 1997
<i>Natural Gas Pipeline and System Expansions</i>	April 1997
<i>Natural Gas Analysis and Geographic Information Systems</i>	March 1997

Appendix E

Technical Contacts

Section	Tables		Principal Data Sources	Technical Contact
Summary Statistics: Natural Gas Production	1,2,3	Monthly: Annual:	EIA-895, "Monthly Quantity of Natural Gas Report"	Sharon Belcher (202)586-6119
		Monthly:	Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"	Roy Kass (202)586-4790
Extraction Loss	1	Monthly: Annual:	EIA computations Form EIA-816, "Monthly Natural Gas Liquids Report" and Form EIA-64A, "Annual Report of the Origin of Natural Gas Liquids Production"	Margo Natof (202)586-6303
Supplemental Gaseous Fuels	2	Monthly: Annual:	EIA computations Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition"	Margo Natof (202)586-6303
Imports and Exports	2	Monthly: Annual:	EIA computations Office of Fossil Energy, U.S. Department of Energy, "Natural Gas Import and Exports"	Ann Ducca (202)586-6137
Price: City Gate, Residential, Commercial, and Industrial	4	Monthly:	Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"	Roy Kass (202)586-4790
Wellhead	4	Monthly: Annual:	EIA computations Form EIA-895, "Monthly Quantity and Value of Natural Gas Report"	Sylvia Norris (202)586-6106
Electric Utility	4	Monthly:	Form FPC-423, "Cost and Quality of Fuels for Electric Power Plants"	Roy Kass (202)586-4790
Summary of Natural Gas Imports and Exports	5,6	Monthly:	Quarterly Natural Gas Import and Export Sales and Price Report	Ann Ducca (202)586-6137
Producer Related Activities: Natural Gas Production	7,8	Monthly:	EIA-895, "Monthly Quantity of Natural Gas Report"	Sharon Belcher (202)586-6119
Underground Storage:	9,10,11, 12,13,14	Monthly:	Forms FERC-8 and EIA-191, "Underground Gas Storage Report"	Carol Jones (202) 586-6168
Distribution and Consumption: Deliveries to: Residential, Commercial, Industrial, Electric Utility, All Consumers	15 16 17 18 19	Monthly:	Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers" Form FERC-423, "Cost and Quality of Fuels for Electric Power Plants"	Roy Kass (202)586-4790
Average Price to: City Gate, Residential, Commercial, Industrial, Electric Utility Onsystem Sales	20 21 22 23 24 25	Monthly:	Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers" Form FERC-423, "Cost and Quality of Fuels for Electric Power Plants"	Roy Kass (202)586-4790
		Monthly:	Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"	Roy Kass (202)586-4790
Heating Degree Days	26	Seasonal:	National Oceanic and Atmospheric Administration	Patricia Wells (202)586-6077
Highlights				Mary Carlson (202)586-4749

Glossary

Aquifer Storage Field: A sub-surface facility for storing natural gas, consisting of water-bearing sands topped by an impermeable cap rock.

Balancing Item: Represents the difference between the sum of the components of natural gas supply and the sum of the components of natural gas disposition. These differences may be due to quantities lost or to the effects of data reporting problems. Reporting problems include differences due to the net result of conversions of flow data metered at varying temperature and pressure bases and converted to a standard temperature and pressure base; the effect of variations in company accounting and billing practices; differences between billing cycle and calendar period time frames; and imbalances resulting from the merger of data reporting systems which vary in scope, format, definitions, and type of respondents.

Base (Cushion) Gas: The volume of gas needed as a permanent inventory to maintain adequate underground storage reservoir pressures and deliverability rates throughout the withdrawal season. All native gas is included in the base gas volume.

British Thermal Unit (Btu): The heat required to raise the temperature of one pound of water by one degree Fahrenheit at or near 39.2 degrees Fahrenheit.

City-gate: A point or measuring station at which a gas distribution company receives gas from a pipeline company or transmission system.

Commercial Consumption: Gas used by nonmanufacturing establishments or agencies primarily engaged in the sale of goods or services such as hotels, restaurants, wholesale and retail stores and other service enterprises; and gas used by local, State and Federal agencies engaged in nonmanufacturing activities.

Depletion: The loss in service value incurred in connection with the exhaustion of the natural gas reserves in the course of service.

Depleted Storage Field: A sub-surface natural geological reservoir, usually a depleted oil or gas field, used for storing natural gas.

Depreciation: The loss in service value not restored by current maintenance, incurred in connection with the consumption or respective retirement of a gas plant in the course of service from causes that are known to be in current operation and against which the utility is not protected by insurance; for example, wear and tear, decay, obsolescence, changes in demand and requirements of public authorities, and the exhaustion of natural resources.

Dry Natural Gas Production: Marketed production less extraction loss.

Electric Utility: An enterprise that is engaged in the generation, transmission, or distribution of electric energy primarily for use by the public and that is the major power supplier within a designated service area. Electric utilities include investor-owned, publicly-owned, cooperatively-owned, and government-owned (municipals, Federal agencies, State projects, and public power districts) systems.

Electric Utility Consumption: Gas used as fuel in electric utility plants.

Exports: Natural gas deliveries out of the continental United States and Alaska to foreign countries.

Extraction Loss: The reduction in volume of natural gas resulting from the removal of natural gas liquid constituents at natural gas processing plants.

Flared: The volume of gas burned in flares on the base site or at gas processing plants.

Gas Condensate Well: A gas well that produces from a gas reservoir containing considerable quantities of liquid hydrocarbons in the pentane and heavier range generally described as "condensate."

Gas Well: A well completed for the production of natural gas from one or more gas zones or reservoirs

Gross Withdrawals: Full well stream volume, including all natural gas plant liquid and nonhydrocarbon gases, but excluding lease condensate. Also includes amounts delivered as royalty payments or consumed in field operations.

Heating Value: The average number of British thermal units per cubic foot of natural gas as determined from tests of fuel samples.

Imports: Natural gas received in the Continental United States (including Alaska) from a foreign country.

Independent Producers: Any person who is engaged in the production or gathering of natural gas and who sells natural gas in interstate commerce for resale but who is not engaged in the transportation of natural gas (other than gathering) by pipeline in interstate commerce.

Industrial Consumption: Natural gas used for heat, power, or chemical feedstock by manufacturing establishments or those engaged in mining or other mineral extraction as well as consumers in agriculture, forestry, and fisheries. Also included in industrial consumption are natural gas volumes used in the generation of electricity by other than regulated electric utilities.

Interstate Companies: Natural gas pipeline companies subject to FERC jurisdiction.

Intransit Deliveries: Redeliveries to a foreign country of foreign gas received for transportation across U.S. territory and deliveries of U.S. gas to a foreign country for transportation across its territory and redelivery to the United States.

Intransit Receipts: Receipts of foreign gas for transportation across U.S. territory and redelivery to a foreign country and redeliveries to the United States of U.S. gas transported across foreign territory.

Intrastate Companies: Companies not subject to FERC jurisdiction.

Lease and Plant Fuel: Natural gas used in well, field, lease operations and as fuel in natural gas processing plants.

Liquefied Natural Gas (LNG): Natural gas that has been liquefied by reducing its temperature to minus 260 degrees Fahrenheit at atmospheric pressure.

Marketed Production: Gross withdrawals less gas used for repressuring, quantities vented and flared, and nonhydrocarbon gases removed in treating or processing operations. Includes all quantities of gas used in field and processing operations. See Explanatory Note 1 for discussion of coverage of data concerning nonhydrocarbon gases removed.

Native Gas: Gas in place at the time that a reservoir was converted to use as an underground storage reservoir as in contrast to injected gas volumes.

Natural Gas: A mixture of hydrocarbon compounds and small quantities of various nonhydrocarbons existing in the gaseous phase or solution with oil in natural underground reservoirs at reservoir conditions.

Nonhydrocarbon Gases: Typical nonhydrocarbon gases that may be present in reservoir natural gas are carbon dioxide, helium, hydrogen sulfide, and nitrogen.

Oil Well (Casinghead) Gas: Associated and dissolved gas produced along with crude oil from oil completions.

Onsystem Sales: Sales to customers where the delivery point is a point on, or directly interconnected with, a transportation, storage, and/or distribution system operated by the reporting company.

Pipeline Fuel: Gas consumed in the operation of pipelines, primarily in compressors.

Repressuring: The injection of gas into oil or gas formations to effect greater ultimate recovery.

Residential Consumption: Gas used in private dwellings, including apartments, for heating, cooking, water heating, and other household uses.

Salt Cavern Storage Field: A storage facility that is a cavern hollowed out in either a salt "bed" or "dome" formation.

Storage Additions: The volume of gas injected or otherwise added to underground natural gas or liquefied natural gas storage during the applicable reporting period.

Storage Withdrawals: Total volume of gas withdrawn from underground storage or liquefied natural gas storage during the applicable reporting period.

Supplemental Gaseous Fuels Supplies: Synthetic natural gas, propane-air, refinery gas, biomass gas, air injected for stabilization of heating content, and manufactured gas commingled and distributed with natural gas.

Synthetic Natural Gas (SNG): A manufactured product chemically similar in most respects to natural gas, that results from the conversion or reforming of petroleum hydrocarbons and may easily be substituted for or interchanged with pipeline quality natural gas.

Therm: One-hundred thousand British thermal units.

Underground Gas Storage Reservoir Capacity: Interstate company reservoir capacities are those certificated by FERC. Independent producer and intrastate

company reservoir capacities are reported as developed capacity.

Vented Gas: Gas released into the air on the base site or at processing plants.

Wellhead Price: Represents the wellhead sales price, including charges for natural gas plant liquids subsequently removed from the gas, gathering and compression charges, and State production, severance, and/or similar charges.

Working (Top Storage) Gas: The volume of gas in an underground storage reservoir above the designed level of the base. It may or may not be completely withdrawn during any particular withdrawal season. Conditions permitting, the total working capacity could be used more than once during any season.